VIBRATION AND LOADS IN HINGELESS ROTORS

VOLUME II - Experimental Data

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SUMMARY

Volume II contains descriptions, geometry, and technical data covering three rotor systems. It also contains tables of experimental data gathered during wind tunnel testing of two of the systems.

Both analyzed experimental data, ready for comparison with theory, and the basic reduced data from which they were obtained are included.

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INTRODUCTION

To gain confidence that theories, developed through the application of logic, do correctly represent the physical processes at work in a mechanical system, there is an ultimate test - comparison of the results of the theories with measurements of the physical process itself.

Volume I of this report, discussed in detail the processes of logic employed in evolving sets of equations describing the motions of, and forces on, general multibladed hingeless rotor systems. It also presented the calculated results of the response of the equations representing such systems to selected forcing functions in as general a way as practical and compared them with carefully interpreted results of rotor experiments.

Volume II presents the logic involved in the gathering and analysis of the experimental data and presents the detailed physical properties of the rotor systems tested. A comprehensive detailed description of each rotor system was felt to be necessary so that information would be available to others who wished to test more comprehensive theories against measured data.

The main function of Volume II, however, is to act as a compendium of the experimental data measured on two of the three rotor systems of this study: the 33-foot, 3-blade rotor and the 7.5-foot, 4-blade rotor. The 35-foot 4-blade rotor data is referenced.

The data is first presented in its interpreted or analyzed form, ready for comparison with theory. In this form, however, certain aspects of the data, not included in the theoretical representation, may be missing. For this reason the data are also presented from which the interpretations were made. In this way the reader is free to make his own interpretation as he wishes.

SYMBOLS

b	Number of blades
c	Chord, ft.
C_R	Rotating damping, ft. lb/rad/sec
C_S	Stationary damping, ft. lb/rad/sec
C_l	Root cut out fraction
F	Collective control force, lb
I_G	Gyroscope diametral moment of inertia, slugs ft.^{2}
I_o	Blade quarter chord moment of inertia, slugs ft.^{2}
k	Mechanical advantage
k_{cr}	Rotating damping coefficient
k_{cs}	Stationary damping coefficient
k_s	Swashplate spring rate, ft. lb./rad
L	Hub roll moment, ft. lb.
M	Hub pitch moment, ft. lb.
M_θ	Swashplate pitch moment, ft. lb.
M_ϕ	Swashplate roll moment, ft. lb.
P	Per revolution, or first flap frequency ratio
r	Radial distance, ft.
R	Rotor radius, ft.
V	Forward speed, ft./sec
X	Shaft shear force, aft, lb.
Y	Shaft shear force, right, lb.
$\ddot{Z}$	Vertical acceleration, ft./sec^2
α	Angle of attack, deg. or rad.
α_n	Blade section normal angle of attach, deg. or rad.
β_o	Rotor precore angle, deg. or rad
γ	Lock number
γ_f	Feathering lock number, see VOL. I
δ	Blade deflection, ft.
δ_{TIP}	Blade tip deflection, ft.
θ	Swashplate pitch angle, rad.

θ_t	Blade twist rate, rad/ft
θ_o	Collective pitch, at zero radius, deg. or rad.
$\theta_{.75R}$	Collective pitch, at 3/4 radius, deg. or rad.
θ_{lc}	Lateral cyclic pitch, deg. or rad
θ_{ls}	Longitudinal cyclic pitch, deg or rad
$\dot{\Theta}$	Rotor pitch rate, rad./sec
μ	Advance ratio, approximately, $\frac{V}{\Omega R}$
ρ	Air density, slugs/ft.^{3}
σ	Solidity
ϕ	Swashplate roll displacement, rad.
Φ	Rotor roll rate, rad/sec
ψ	Azimuth position of number 1 blade, rad.
Ω	Rotor rotation rate, rad/sec
Ω_G	Gyroscope rotation rate, rad/sec

ROTOR SYSTEM PHYSICAL DATA

In this section a physical description of each of the three rotor systems is presented. The geometry, distribution of mass and stiffness, aerodynamics and experimental vibration modes of the blade, rotor, swashplate, gyroscope, and attached airframe, where applicable, are described in detail.

33-Foot, 3-Blade Rotor

The 33-foot 3-blade rotor model consisted of the rotor, a high-speed gyroscope stabilized free swashplate capable of being fixed (made irreversible) for certain tests and an inertia framework supporting the rotor system. The framework was mounted on the floating tunnel balance table through three streamlined pylons. The tunnel balance-pylon-inertia frame system provided an essentially fixed condition to the rotor shaft. The stiffness of the system, however, coupled with the mass of the inertia frame did provide longitudinal and lateral vibrations modes which were excited during testing. A streamlined helicopter fuselage model faired the inertia frame as shown in Figure 1.

Rotor geometry. - The rotor geometry is defined in Figures 1 through 3 of Volume I. The dimensions and geometric parameters of the rotor are as follows:

Number of blades	$b = 3$
Radius	$R = 16.5$ ft.
Chord	$c = 1.167$ ft.
Root cutout fraction	$C_1 = .15$
Airfoil	NACA 63_2015
Solidity	$\sigma = 0.0675$
Disk area	$\pi R^2 = 855.3$ ft.^{2}
Blade precone	$\beta_o = 2.25$ degrees
Blade forward sweep	$\Lambda = 1.50$ degrees

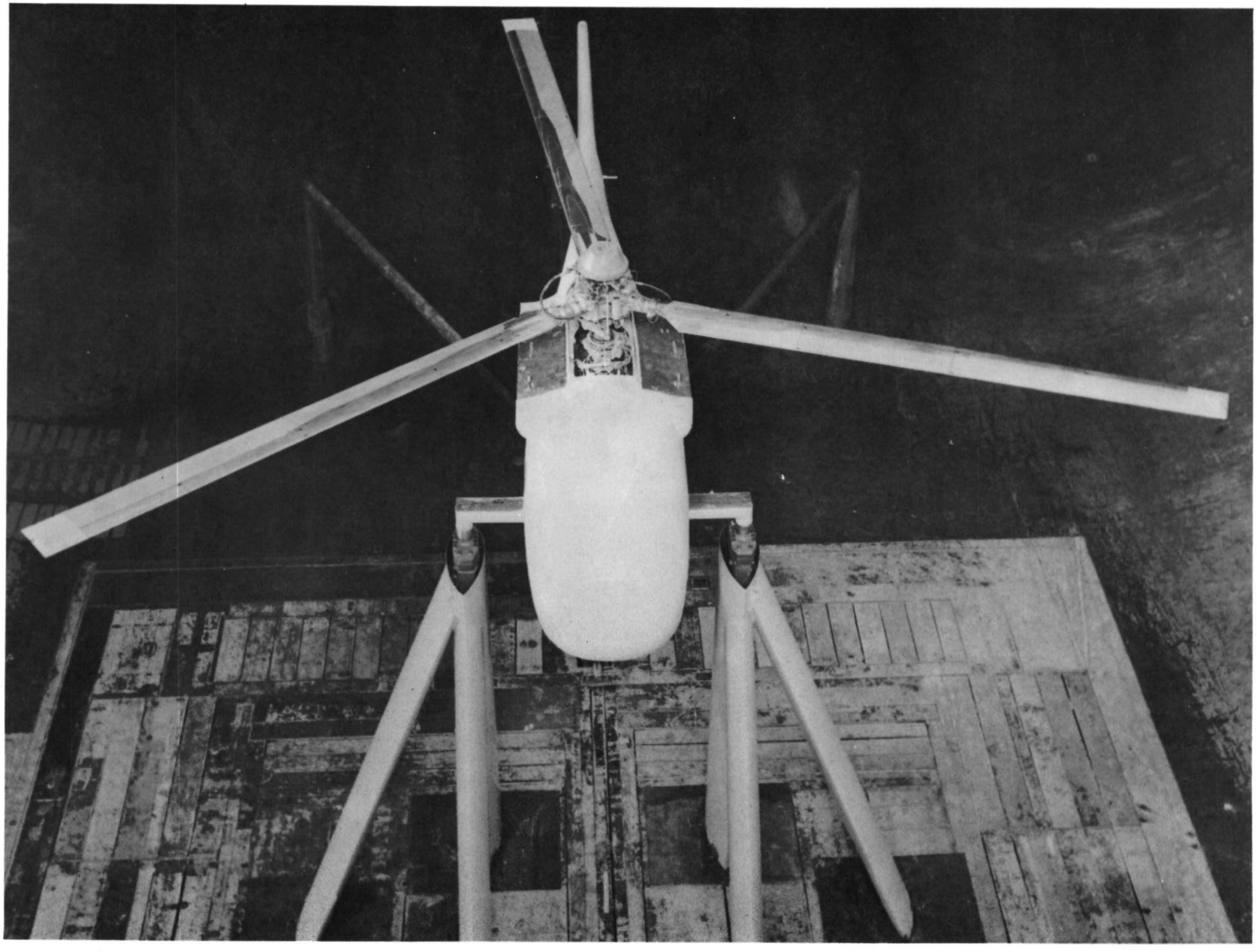


Figure 1. Gyroscope Stabilized 33-Foot 3-Blade Rotor Installed in the Ames 40x80 Foot Wind Tunnel

Blade twist (nose down at tip)	$\theta_t R = -9.43$ degrees
Blade twist axis (passes through shaft centerline)	27% chord
Blade feathering axis	32.5% chord at rotor station 30.85 inches
Cant angle	$\psi_o = 60$ degrees
Mechanical advantage	$k = 1.15$

NOTE: Blade twist is such that when $\theta_{.75R} = 0$, $\theta_o = 7.1$ degrees

Blade section properties for the NACA 63_2015 airfoil over the angle-of-attack range $-15^\circ < \alpha_n < 15^\circ$ are shown in Reference 1.

Blade mass and stiffness distributions. - The 33-foot rotor blade mass and structural properties are given in Figures 2 through 6. The moment of inertia of a single blade about its quarter - chord axis is $I_o = .216$ slug ft^2.

Gyroscope and swashplate data. - The gyroscope polar moment of inertia was:

$$2I_G = .30 \text{ slugs ft}^2$$

Its normal or 100% operating rotation rate was 10,000 rpm.

Swashplate mechanical advantage $k = 1.15$ and swashplate cant angle $\psi_o = 60^\circ$

In the swashplate fixed or locked condition the swashplate restraint to ground possessed the following stiffnesses:

$$\begin{Bmatrix} M_\theta \\ M_\phi \\ F \end{Bmatrix} = \begin{bmatrix} 13{,}000 & -2{,}400 & -9{,}000 \\ -2{,}400 & 13{,}000 & -9{,}000 \\ -11{,}780 & -11{,}780 & 99{,}000 \end{bmatrix} \begin{Bmatrix} \theta \\ \phi \\ \theta_o \end{Bmatrix}$$

where M_θ and M_ϕ are the swashplate moments in ft-lb, F is the swashplate collective force in lb and θ, ϕ and θ_o are the swashplate tilt and blade collective pitch displacements, respectively, measured in radians. All measurements are relative to stationary axes.

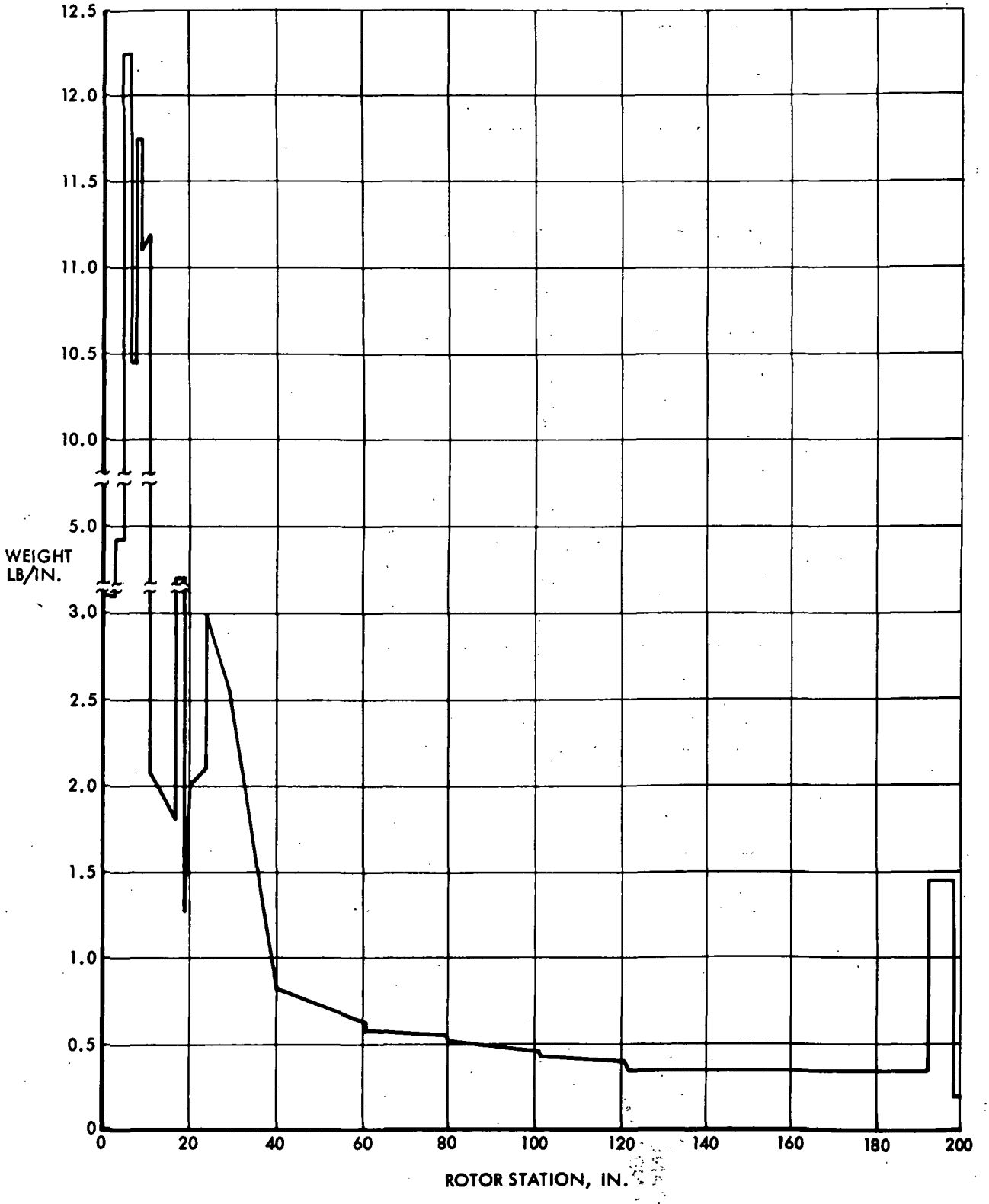


Figure 2. Blade Radial Distribution of Weight for the 33-Foot 3-Blade Rotor

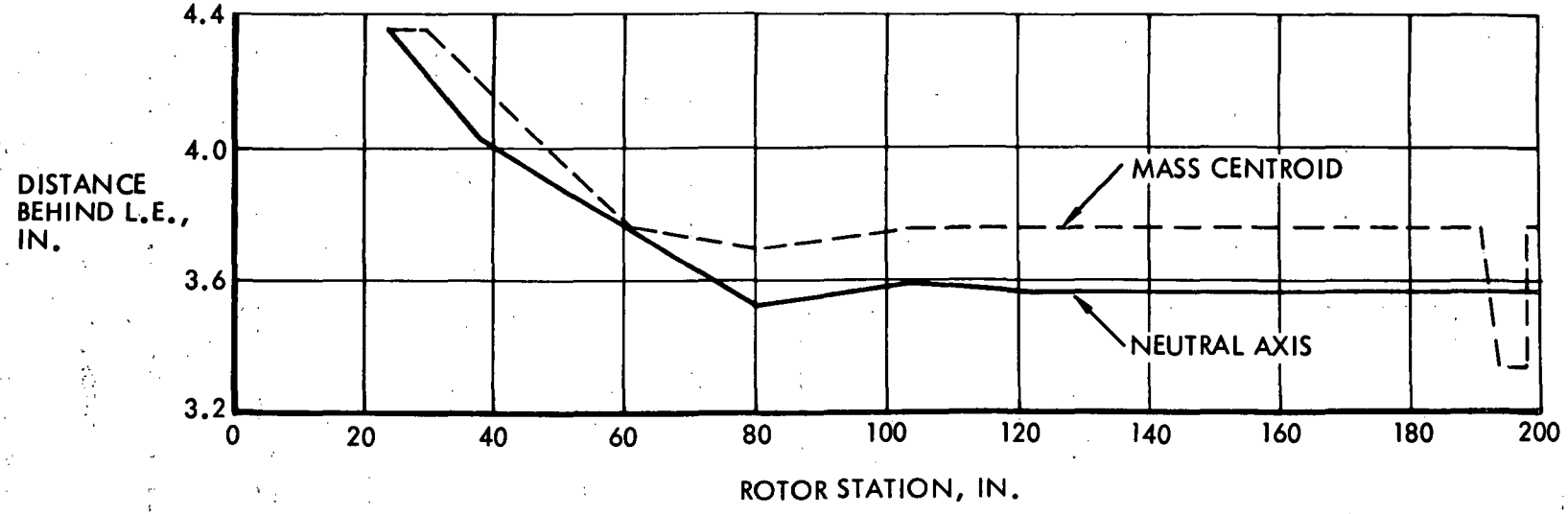


Figure 3. Blade Radial Distribution of Mass Centroid and Neutral Axis for the 33-Foot 3-Blade Rotor

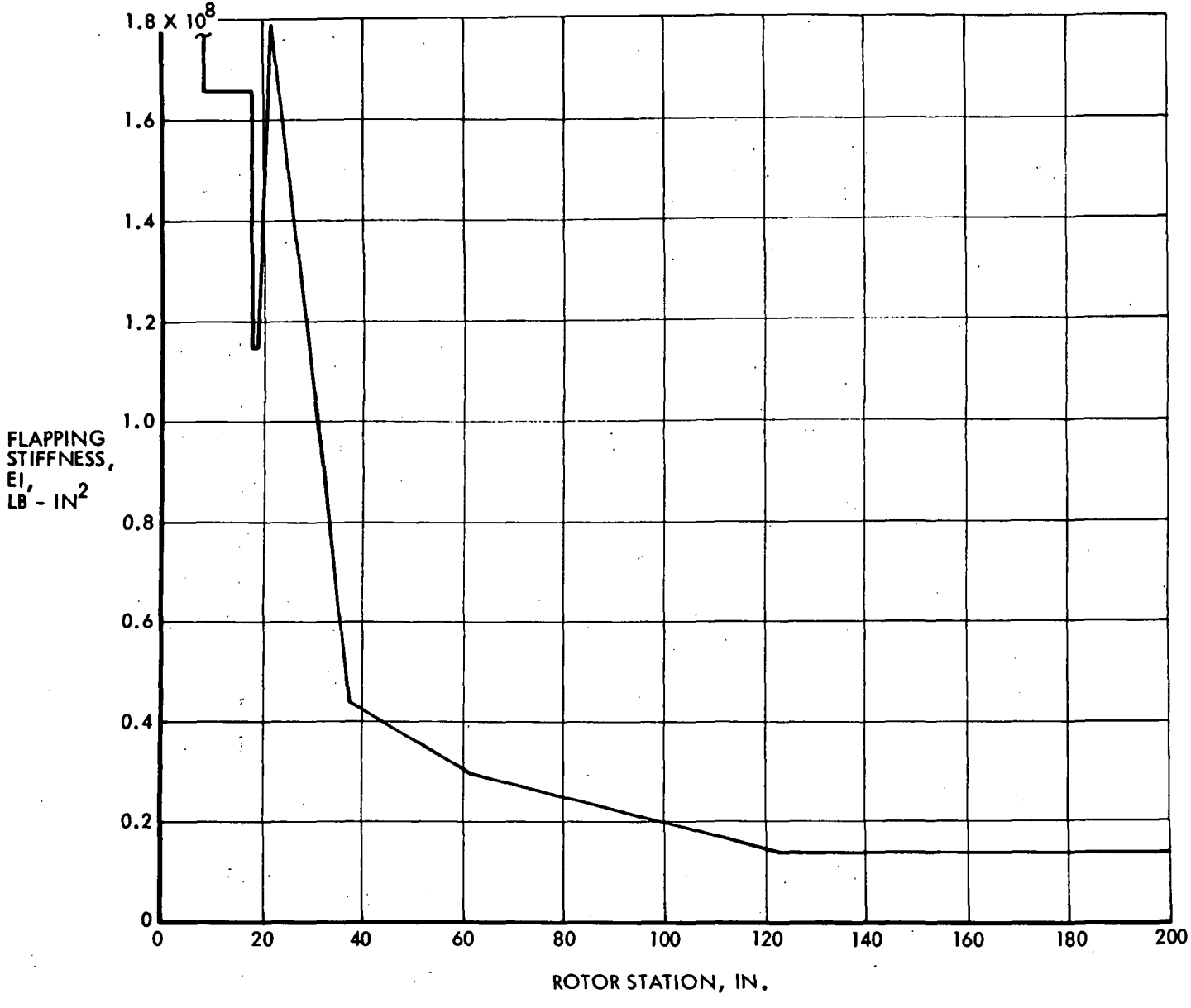


Figure 4. Blade Radial Distribution of Flapping Stiffness for the 33-Foot 3-Blade Rotor

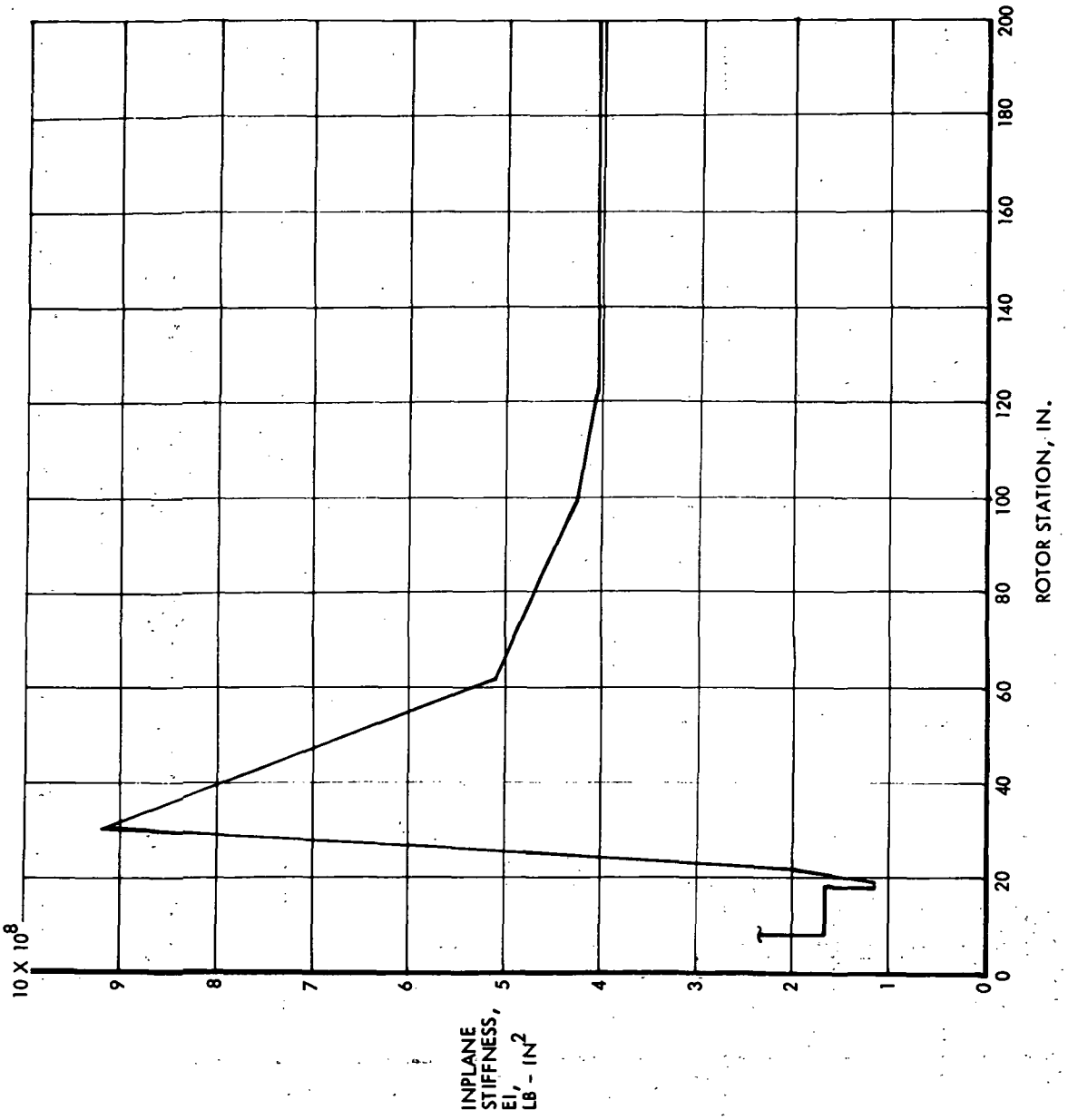


Figure 5. Blade Radial Distribution of In-Plane Stiffness for the 33-Foot 3-Blade Rotor

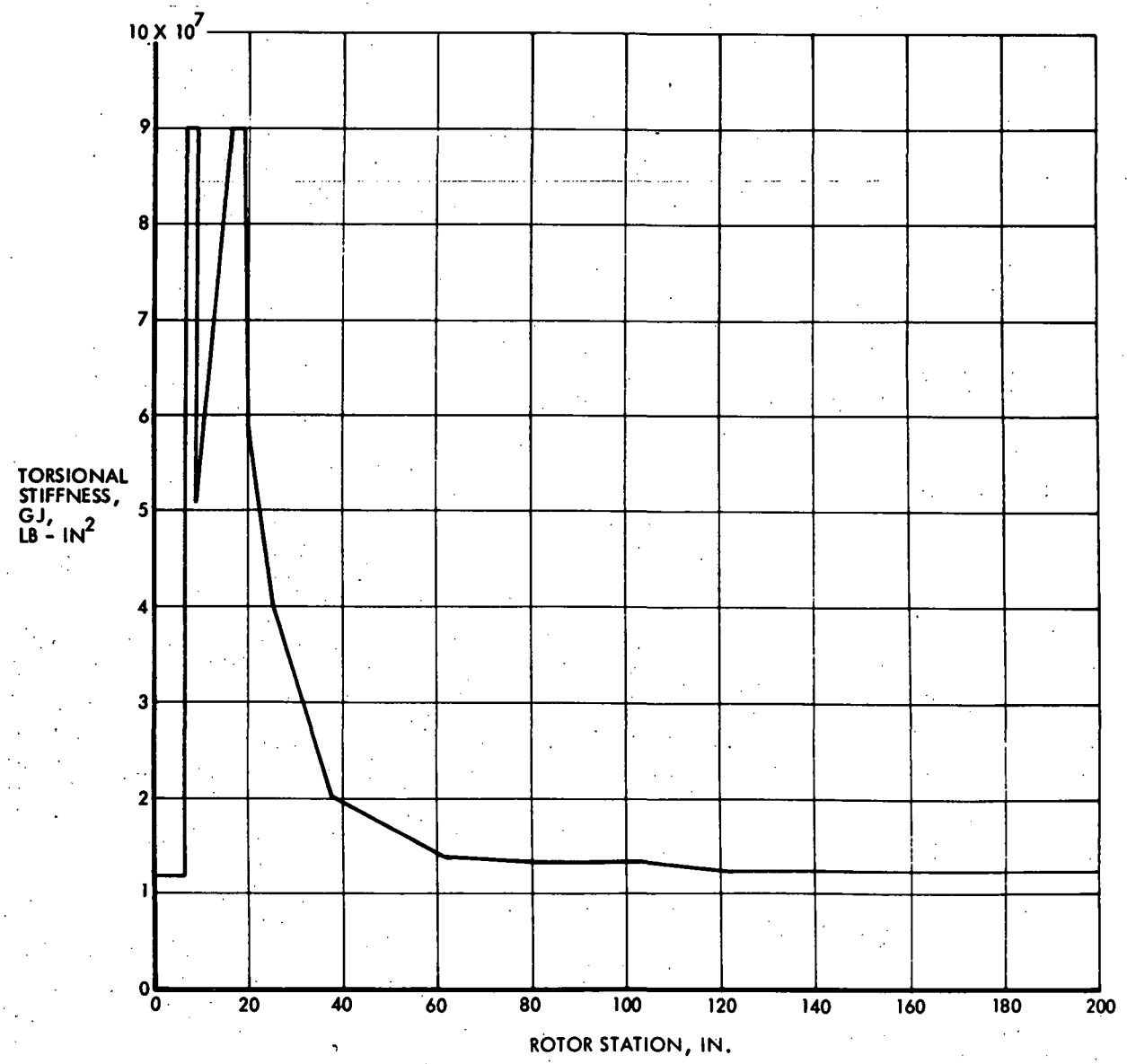


Figure 6. Blade Radial Distribution of Torsional Stiffness for the 33-Foot 3-Blade Rotor

Swashplate stiffness was determined by application of feathering moments to the blades and measurement of the blade feathering deflections that resulted, in a static ground test.

In the free swashplate condition, or with all coefficients of the swashplate stiffness matrix zero but the lower right or collective stiffness element, the idling locking cylinders exerted damping forces on the swashplate. The damping coefficients were symmetric and were estimated from bench test and rotating tests to be approximately C_S = 80 ft/lb/radian/sec. Feathering friction also applied moments to the swashplate. It was quite small and could not be determined precisely. It is estimated to have been of the order of C_R = 7 ft-lb/radian/sec.

Experimental vibration modes. - The rotor experimental vibration tests were aimed at determining, first the single blade vibration mode shapes and frequencies in the essentially vertical direction, and secondly the overall rotor in-plane modes. Because the shaft stiffness was very great compared to that of the blades in vertical flapping it was expected that the shapes and frequencies of the flapping modes would not change significantly when organized into total rotor modes. In the in-plane direction, however, the blades are almost an order of magnitude stiffer than in the flapping direction and it was suspected that the shaft, and perhaps the inertia frame on its support, might interact with the individual blade modes to create significantly different overall rotor modes.

Experimentally measured single blade flapping modes are shown in Figure 7 at zero rpm. In-plane rotor modes were determined experimentally by clamping the rotor against rotation at its stopping brake, and exciting the blades as indicated in Figures 8 through 10. Significant motions of the shaft appears to have taken place in the mode at f = 8.78 cps. The modes at f = 6.1 cps, or longitudinal mode, and f = 6.03 cps, or lateral mode, appear to have been little affected by shaft motion.

The theoretical variation of "single blade" vibration mode frequency with rpm is shown in Figure 11. The two flap modes present no difficulty, but since the in-plane modes apparently involve shaft mations there is no clear-cut

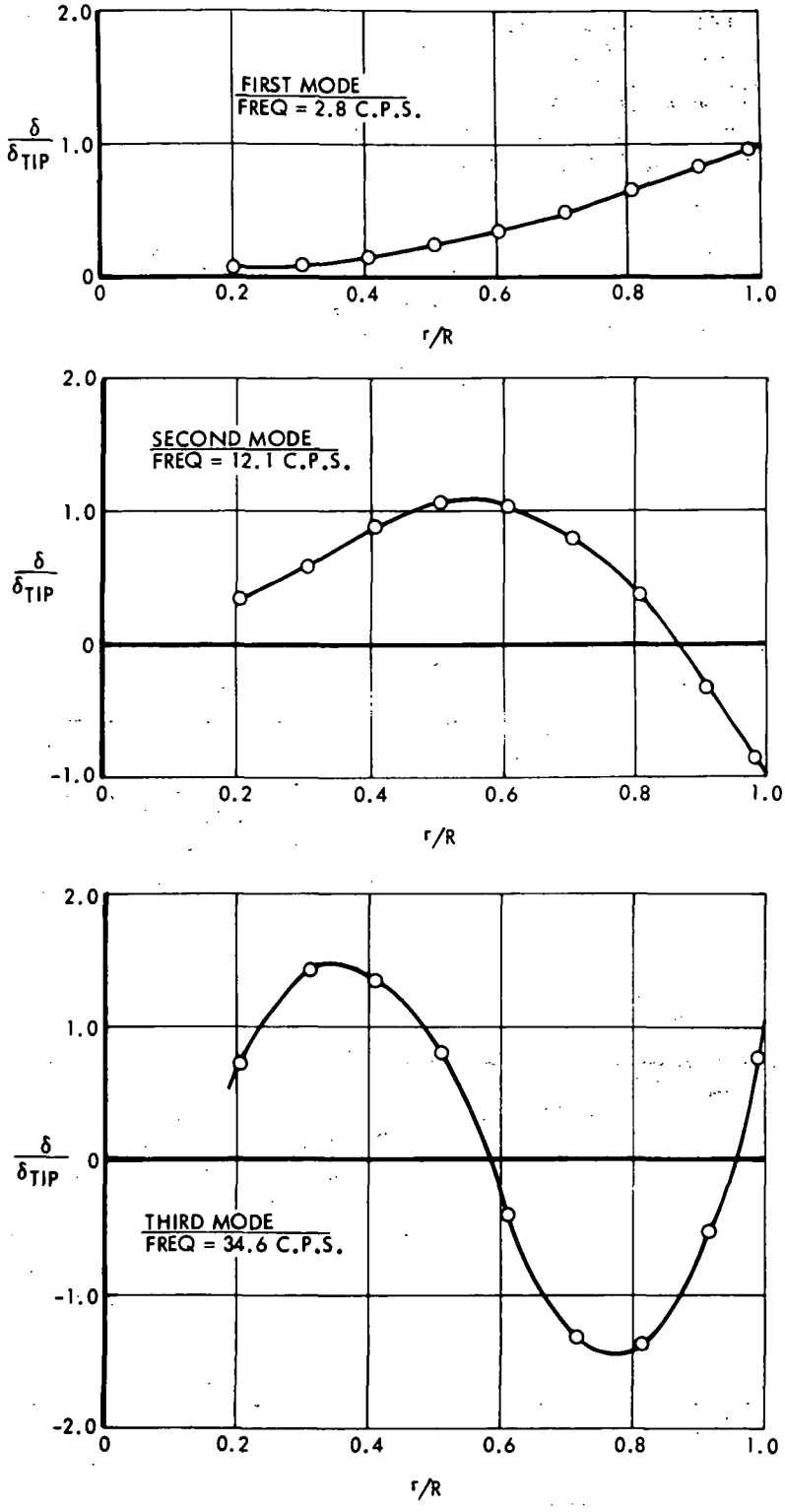


Figure 7. Single Blade Experimental Flapping Modes at Zero rpm for the 33-Foot 3-Blade Rotor, $\theta_{.75R} = 0$

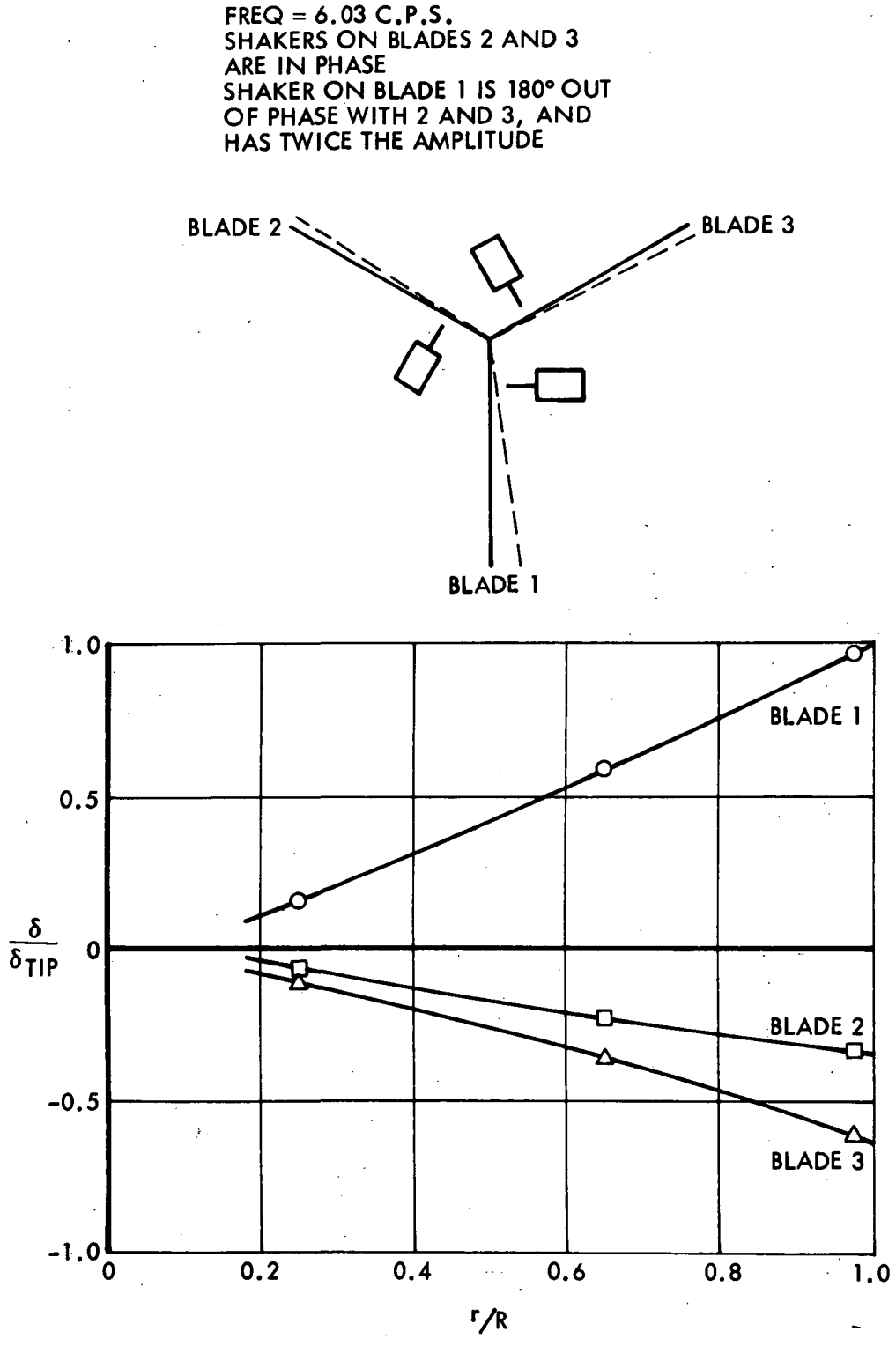


Figure 8. Rotor Experimental In-plane Lateral Natural Mode of Vibration at Zero rpm for the 33-Foot 3-Blade Rotor, $\theta_{.75R} = 0$

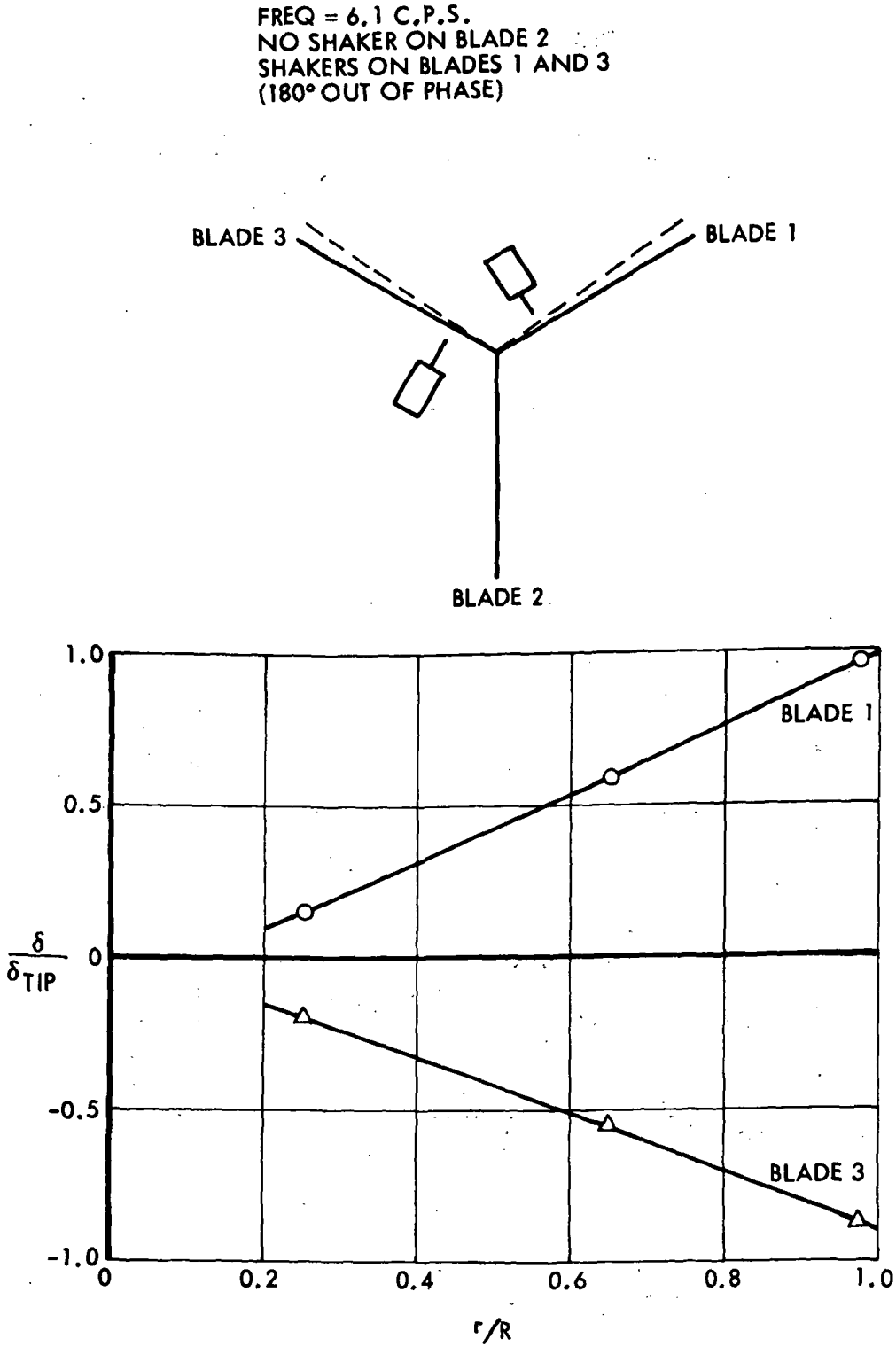


Figure 9. Rotor Experimental In-plane Longitudinal Natural Mode of Vibration at Zero rpm for the 33-Foot 3-Blade Rotor, $\theta_{.75R} = 0$

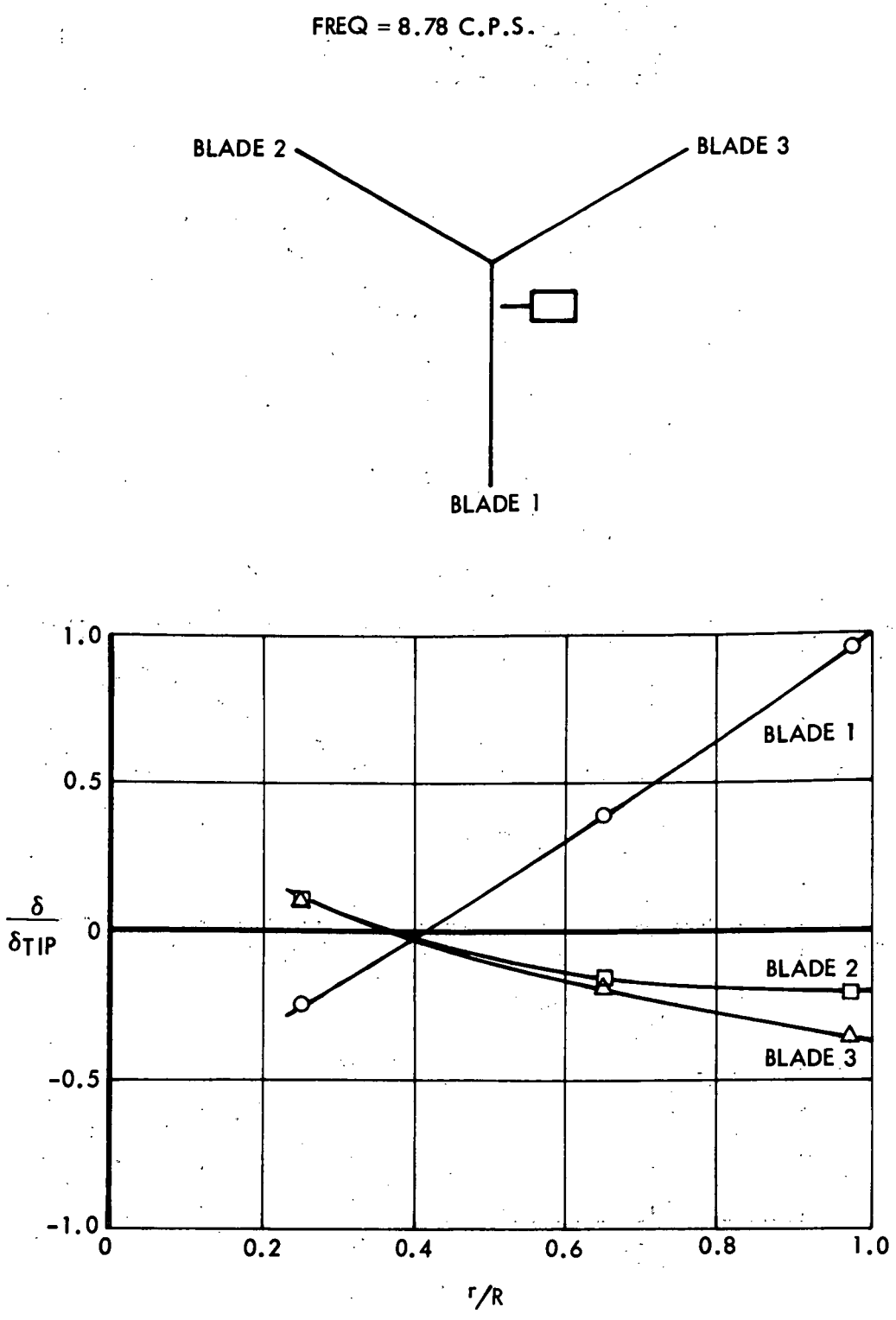


Figure 10. Rotor Experimental In-plane Natural Mode with Shaft Motion at Zero rpm for the 33-Foot 3-Blade Rotor, $\theta_{.75R} = 0$

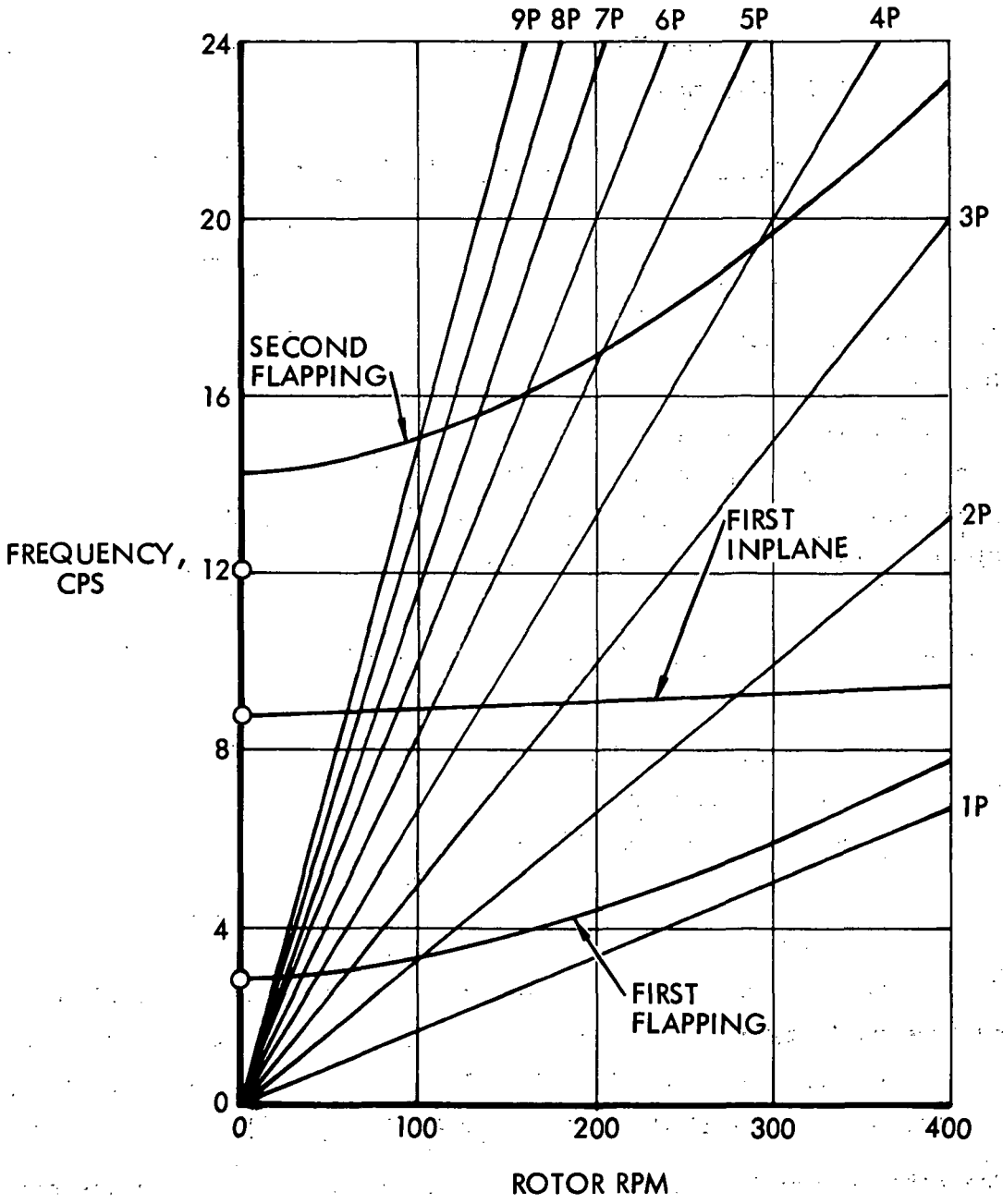


Figure 11. Single Blade Vibration Mode Frequency Variation with rpm for the 33-Foot 3-Blade Rotor

single blade in-plane mode. The in-plane mode shown has been adjusted so that it passes through the two-per-revolution line at the rpm at which maximum in-plane excitation was noticed in the wind tunnel test.

The frequencies of the flap and in-plane modes, at zero rpm, are summarized in the following table.

EXPERIMENTAL BLADE NATURAL FREQUENCIES AT ZERO RPM

Mode	Natural Frequency (CPS)
First flapwise bending	2.8
Second flapwise bending	12.1
Third flapwise bending	34.6
First in-plane longitudinal bending mode	6.1
First in-plane 'lateral bending' mode	6.03
First 'coupled' in-plane/bending mode	8.78

During the wind tunnel test 3P resonances were noted at certain rotor rpm. They were as follows:

Body lateral at 165 rpm
Body longitudinal at 220 rpm
Rotor in-plane at 280 rpm

7.5-Foot 4-Blade Rotor

The 7.5 foot 4-blade rotor was designed to test theories developed for high advance ratio flight. As such it was kept simple so as to keep basic concepts clearly in view. Cyclic and collective pitch were controlled by a fixed swashplate and the blades had no forward sweep, twist, or precone.

The rotor was mounted on a simulated fuselage, as a fairing was needed to cover the power source and swashplate servos. The model was mounted on the wind tunnel balance by a single pylon.

Two blade stiffness configurations are studied in this report. The stiffness is varied by changing the flexures which attach the blades to the

rotor shaft. Stiff and soft flexures are employed. The blade mass distribution remains unchanged and provides a lock number $\gamma = 5.0$ at sea level air density.

Rotor geometry. - The general form of hingeless rotor arrangement considered in this study is shown in Volume I. The particular details of the 7.5-foot four-blade rotor are listed below:

Number of blades	$b = 4$
Radius	$R = 3.75$ ft.
Chord	$c = .375$ ft. (4.5 inches)
Airfoil	NACA 0012
Solidity	$\sigma = .127$
Disk area	$\pi R^2 = 44.2 \text{ ft}^2$
Blade precone	$\beta_o = 0$ degrees
Blade forward sweep	$\Lambda = 0$ degrees
Blade twist	$\theta_t R = 0$ degrees
Blade feathering axis	along quarter-chord line

Aerodynamic properties of the NACA 0012 blade airfoil section over the angle-of-attack range $-15<\alpha<15$ degrees may be found in Reference 1.

Blade mass and stiffness distributions. - The 7.5-foot rotor blade mass and structural stiffness distributions are shown in Figures 12 through 18. It should be noted that the feathering hinge is located just outboard of the interchangeable flexures on the quarter-chord axis.

Theoretical vibration modes. - Calculated first flap mode shapes for the 7.5-foot 4-blade rotor and shown in Figure 19. Shapes for configuration 1 (soft flexure) at 200 and 800 rpm and configuration 3 (stiff flexure) at 800 rpm are shown compared to the parabolic approximation used in the theory.

The theoretical variation of the first and second flapping, first in-plane and first torsion modes with rpm is shown in Figure 20. In this figure are shown experimentally determined rpm values at which blade resonances were observed.

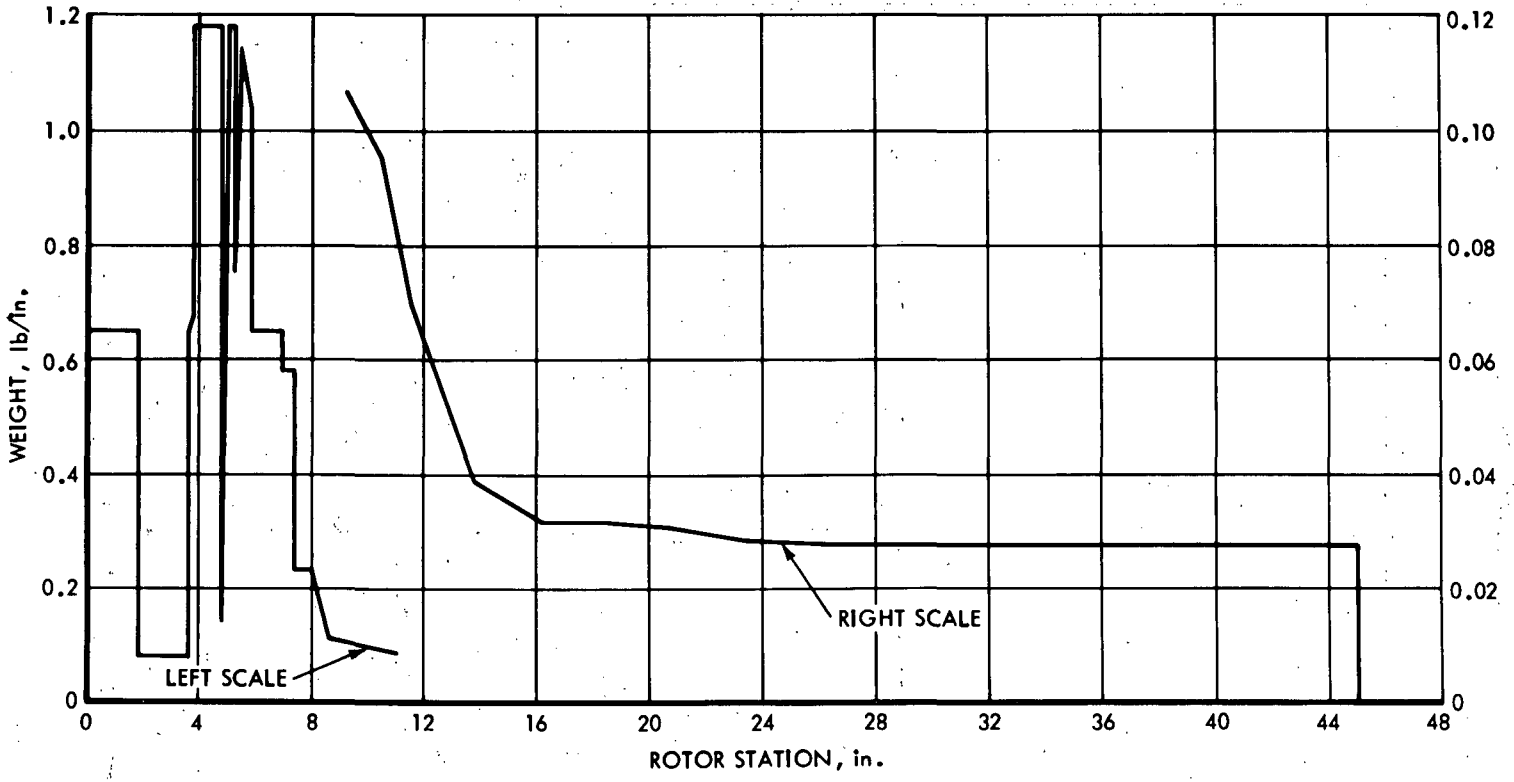


Figure 12. Blade Radial Distribution of Weight for the 7.5-Foot 4-Blade Rotor

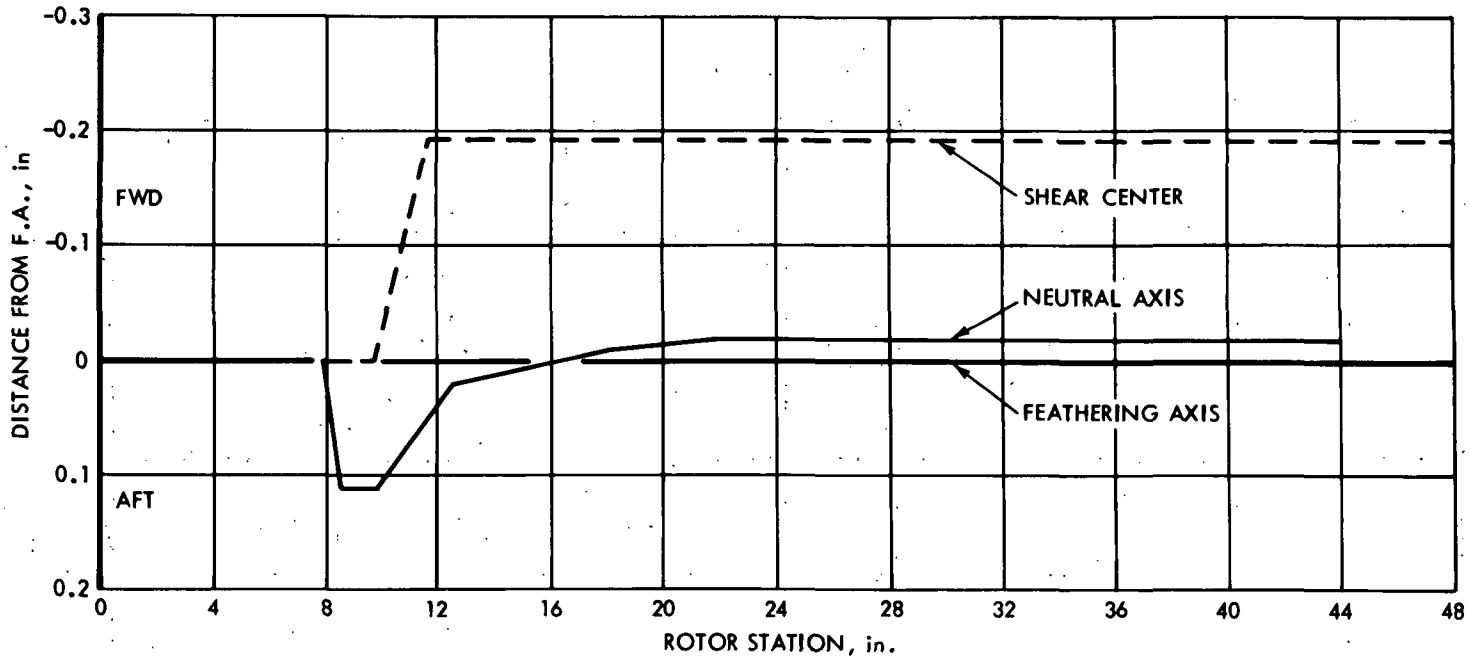


Figure 13. Blade Radial Distribution of Shear Center and Neutral Axis Relative to the Feathering Axis for the 7.5-Foot 4-Blade Rotor

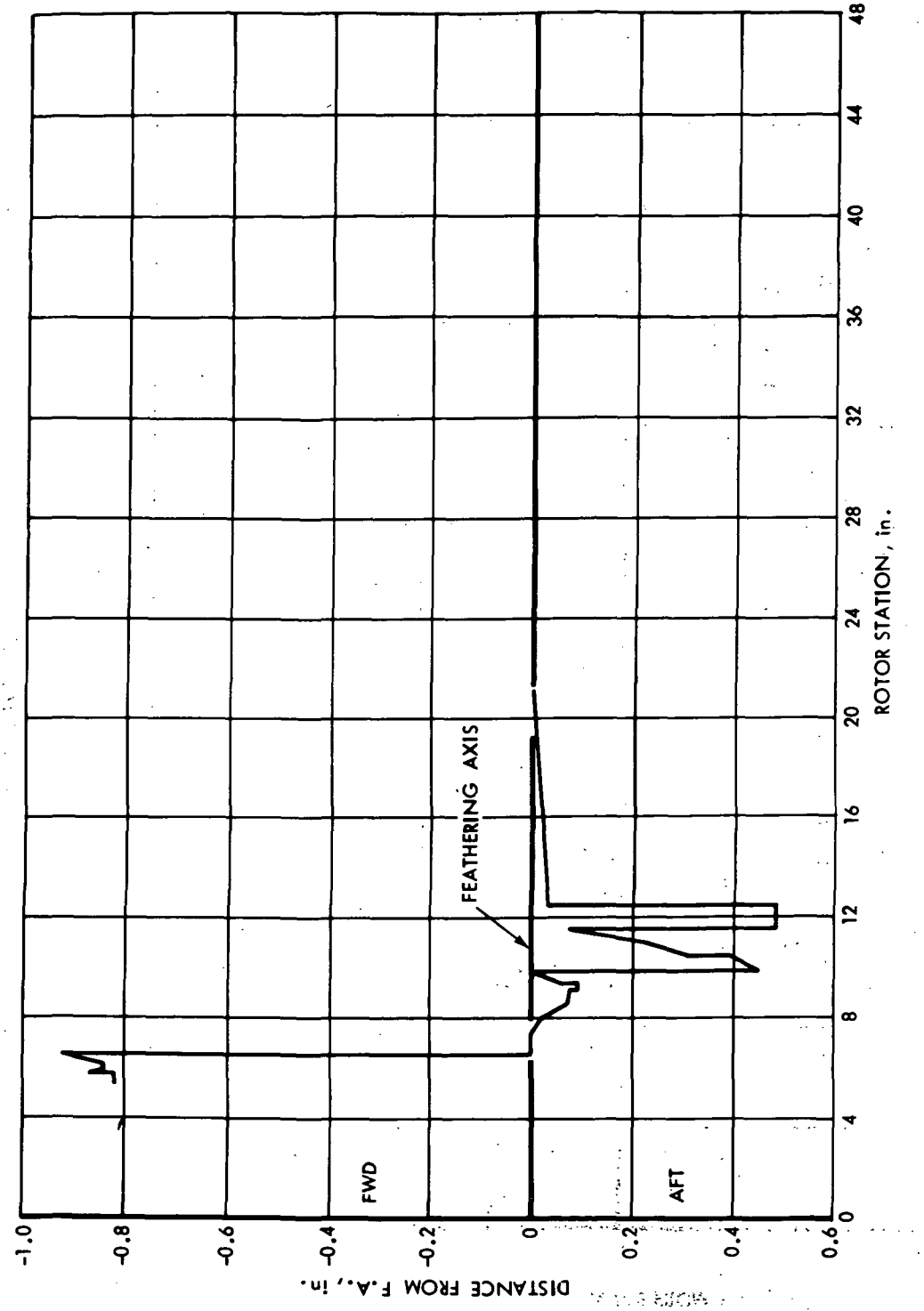


Figure 14. Blade Radial Distribution of Mass Centroid of the 7.5-Foot 4-Blade Rotor

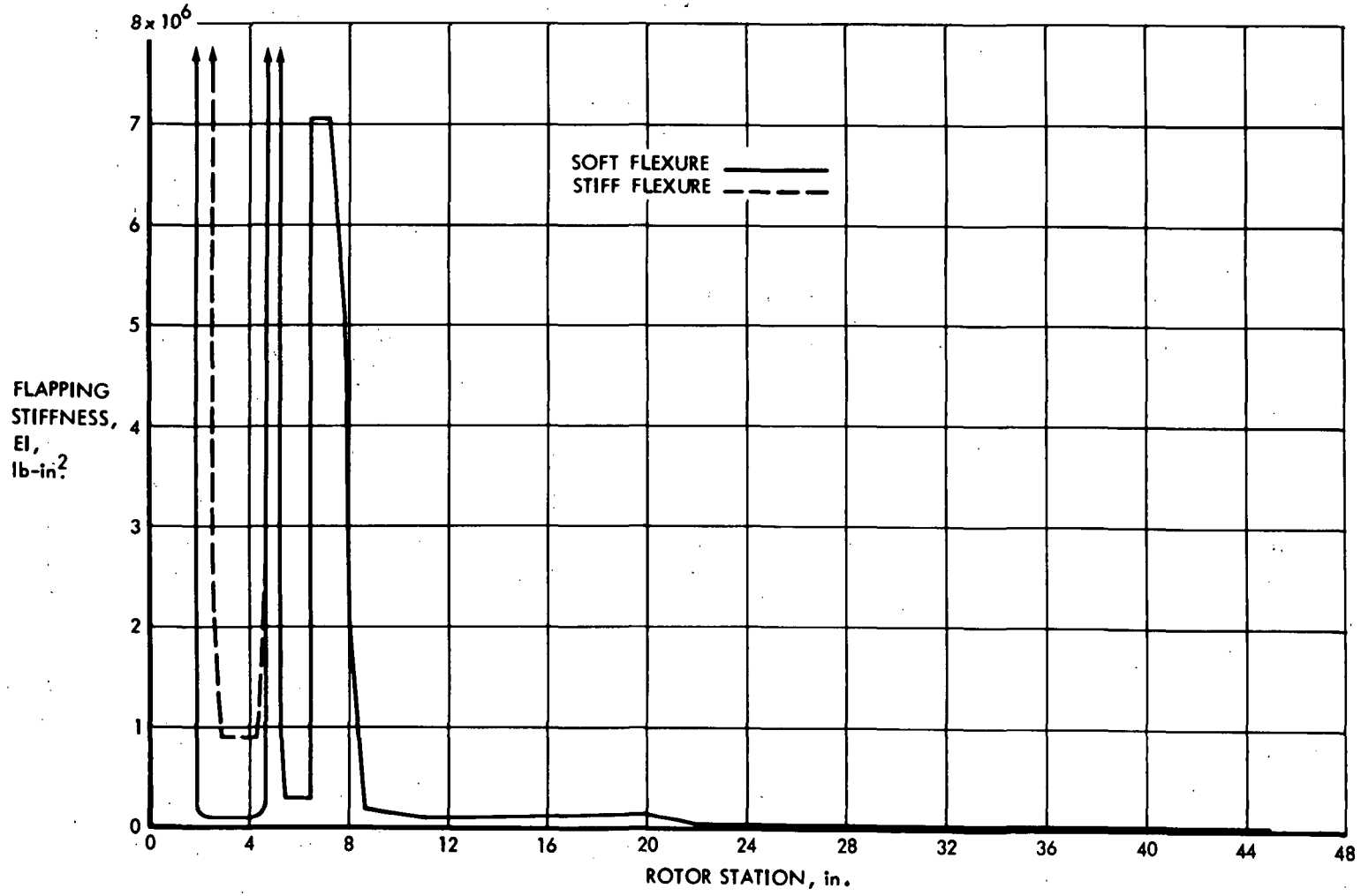


Figure 15. Blade Radial Distribution of Flapping Stiffness for the 7.5-Foot 4-Blade Rotor

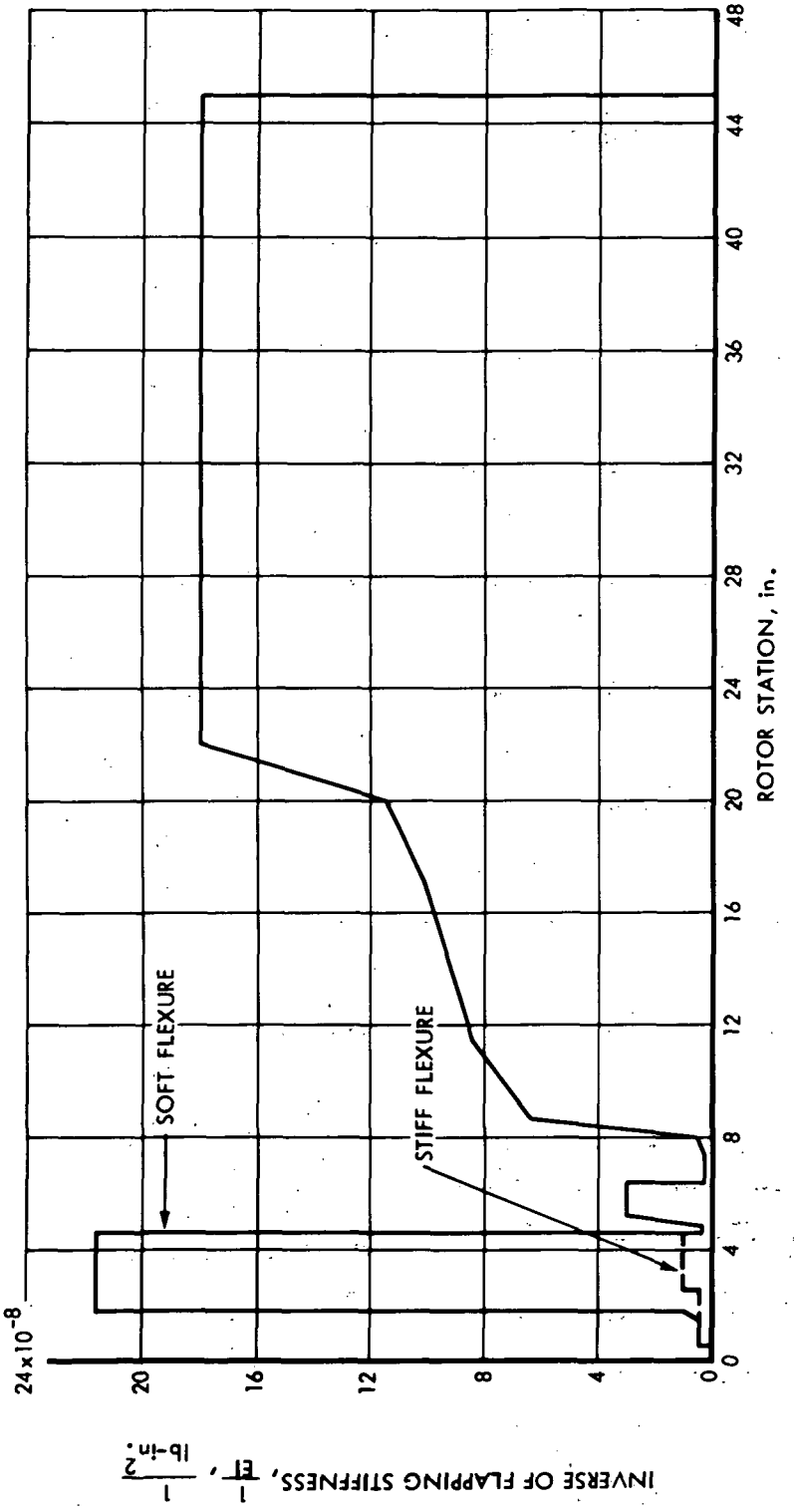


Figure 16. Blade Radial Distribution of the Reciprocal of Flapping Stiffness for the 7.5-Foot 4-Blade Rotor

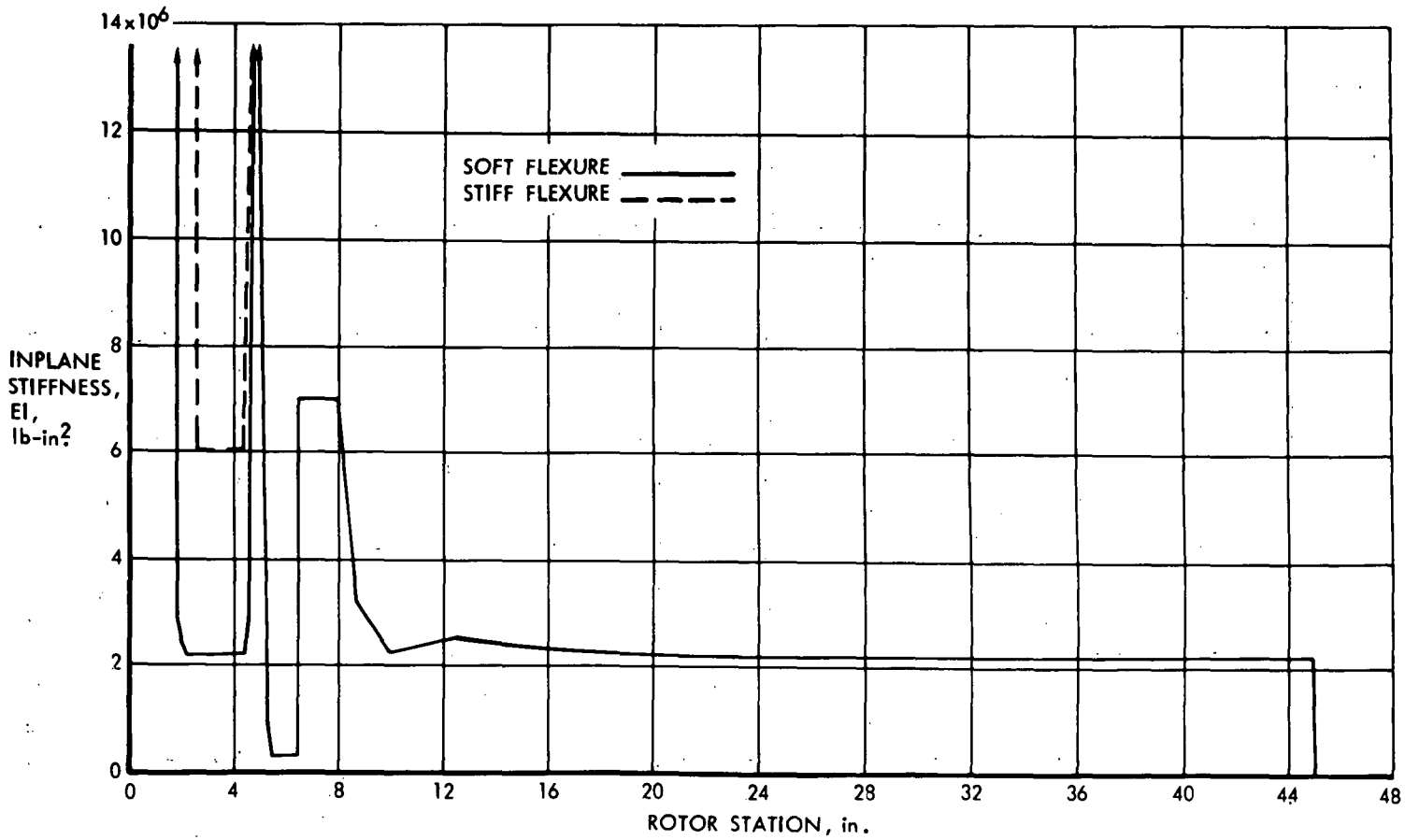


Figure 17. Blade Radial Distribution of In-Plane Stiffness for the 7.5-Foot, 4-Blade Rotor

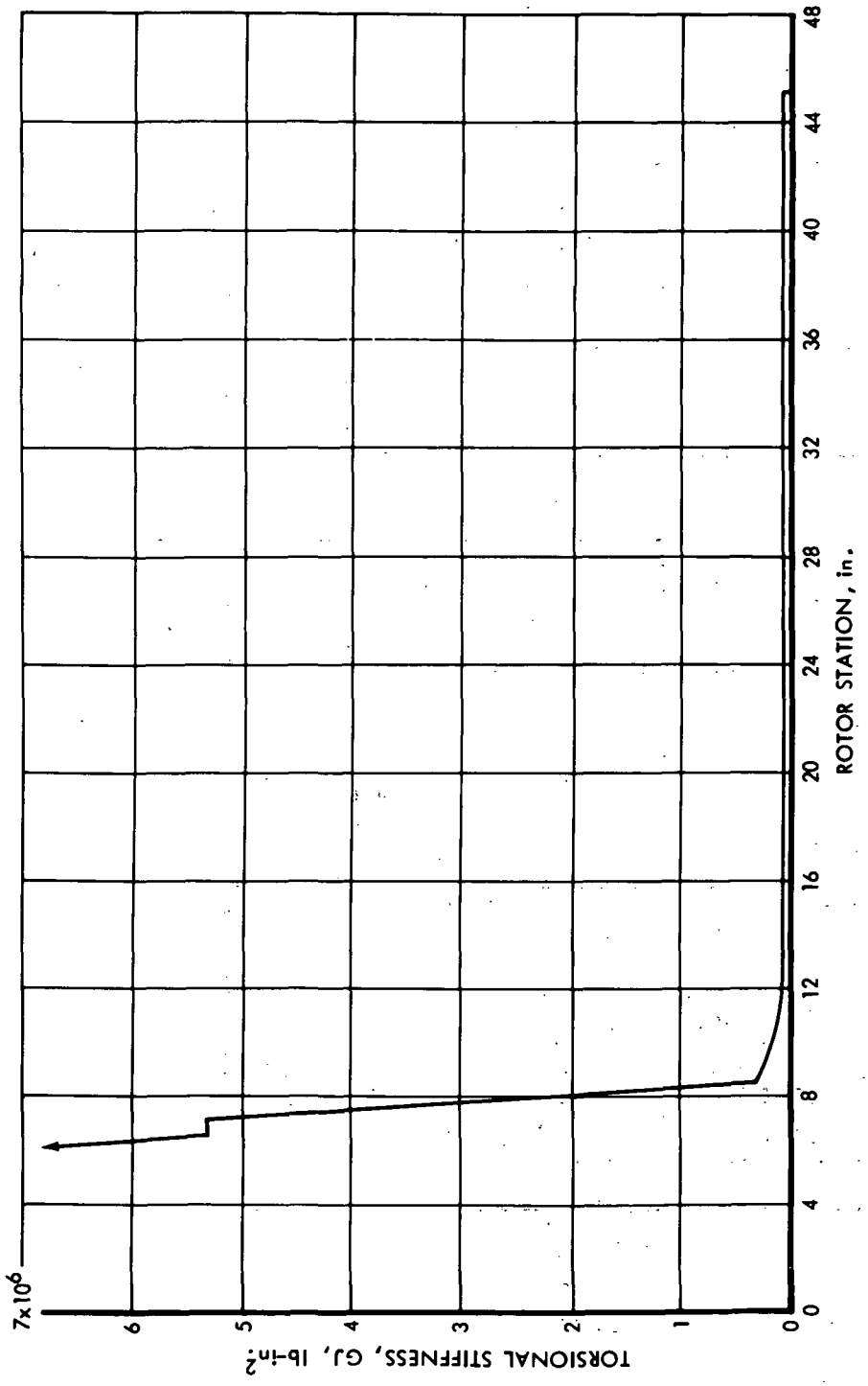


Figure 18. Blade Radial Distribution of Torsional Stiffness for the 7.5-Foot 4-Blade Rotor

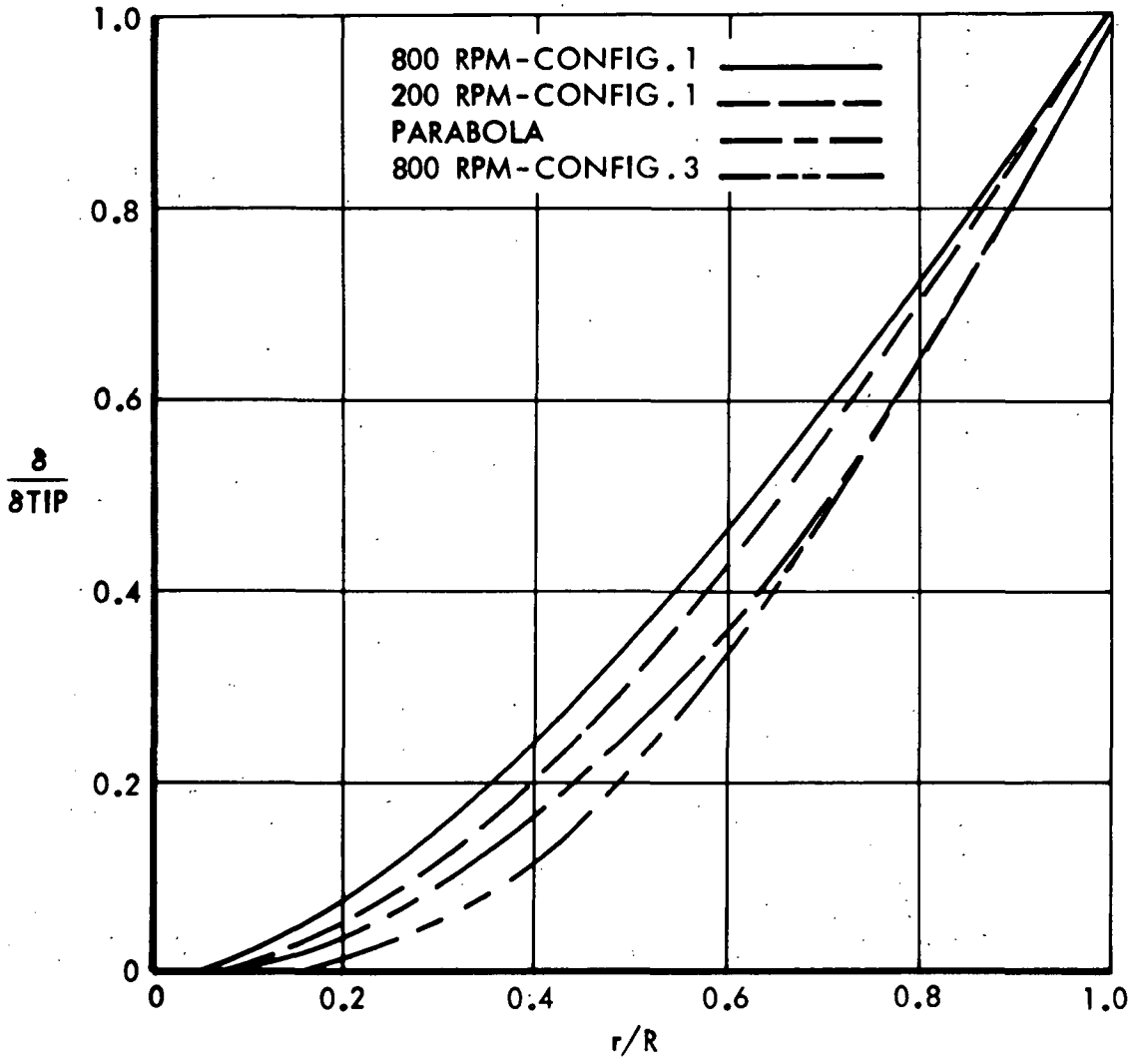


Figure 19. First Flap Mode Shape Variation With Flexure Stiffness and RPM for the 7.5-Foot 4-Blade Rotor

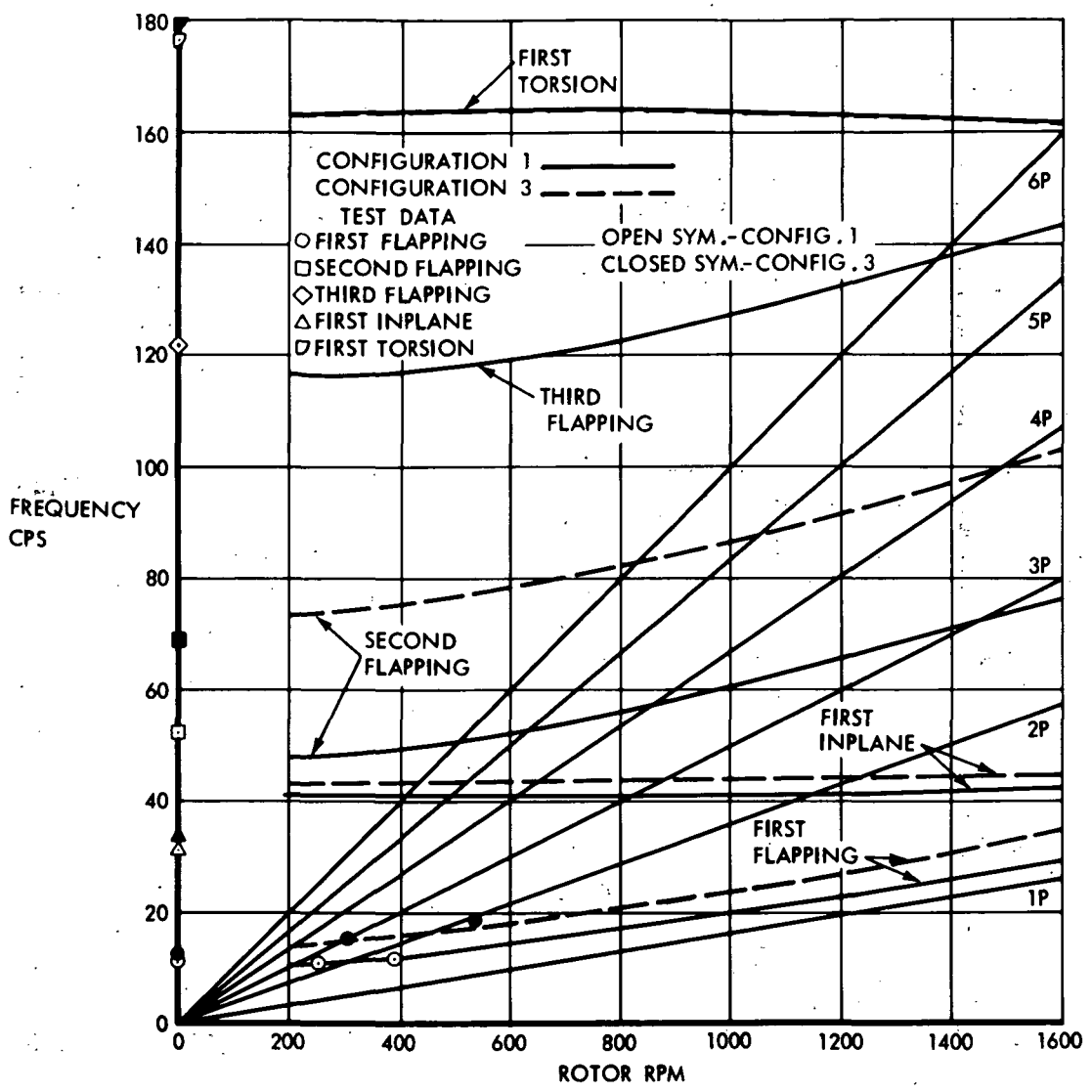


Figure 20. Single Blade Natural Frequency Variation With RPM for the 7.5-Foot 4-Blade Rotor

The following table contains the theoretical natural frequency of vibration of each of the modes of configurations 1 and 3 and a comparison with the equivalent experimentally measured values.

NATURAL FREQUENCIES OF VIBRATION OF THE 7.5-FOOT, 4-BLADE ROTOR

Mode	Theory (cps)	Test (cps)	
		Blade No. 3	Blade No. 4
Configuration 3, Stiff Flexure			
1st Flap	13.9	13.82	13.79
2nd Flap	72.5	66.1	67.2
3rd Flap	--	163	163.3
1st In-Plane	43	33.8	33.2
1st Torsion	164	179	180
Configuration 1, Soft Flexure			
1st Flap	10.65	11.4	11.81
2nd Flap	47	52.0	52.1
3rd Flap	116	121.6	122.7
1st In-Plane	40.9	31.4	32.7
1st Torsion	165	177	176

35-Foot 4-Blade Rotor

The blades of the 35-foot 4-blade rotor of the XH-51A compound helicopter are significantly more flexible than the blades of either the 33-foot or 7.5-foot-diameter rotors and this fact causes the parabolic representation of the first flap mode, employed in the theory, to be rather poor. The fact that the rotor-gyroscope-airframe system is in free flight and the shaft may be considered to be free to pitch, roll, and plunge, however, is adequately accounted for in the theory. The gyroscope differs from that of the 33-foot rotor in that it rotates at rotor rpm. A larger moment of inertia offsets the lower rotation rate and results in similar gyroscope precessive

behavior but the nutating mode frequency is much reduced, compared to the high speed gyroscope, to of the order of 2P (2 oscillations per rotor revolution) in stationary axes. The interaction of the gyroscope with the rotor free shaft system is adequately accounted for in the theory.

This section of the report describes the XH-51A compound helicopter rotor geometry, blade mass and stiffness distributions, airfoil section, swashplate cant angle, mechanical advantage and damping estimates, gyroscope inertia, airframe inertia and aerodynamic properties, and rotor vibration modes.

Rotor geometry. - The 35-foot 4-blade rotor geometry fits into the general pattern established for these analyses and defined in Volume I. A foreshortened drawing of the blade plan form, Figure 21, is included for reference, which shows the feathering axis and local distributions of elastic axis and center of gravity. In addition it should be noted that the blade 27% chord line intersects the axis of rotation rather than the line of aerodynamic centers which lies along the 25% chord line. This provides a very slightly larger effective blade forward sweep angle. This small increase has been ignored in the analysis.

Dimensions and geometric parameters of the XH-51A compound helicopter rotor are listed below.

Number of blades	$b = 4$
Radius	$R = 17.5$ ft
Chord	$c = 1.125$ ft (13.5 inches)
Disk area	$\pi R^2 = 962$ ft^2
Solidity	$\sigma = .0818$
Airfoil section	modified NACA 0012
Twist	$\theta_t R = -5.0$ degrees
Hub precone	$\beta_o = 3.2$ degrees
Preset blade droop at sta 27.85	=-1.0 degree
Blade sweep	$\Lambda = 1.4$ degrees forward
Rotor polar moment of inertia	= 1013 slug ft^2
Normal operating rpm	355 rpm

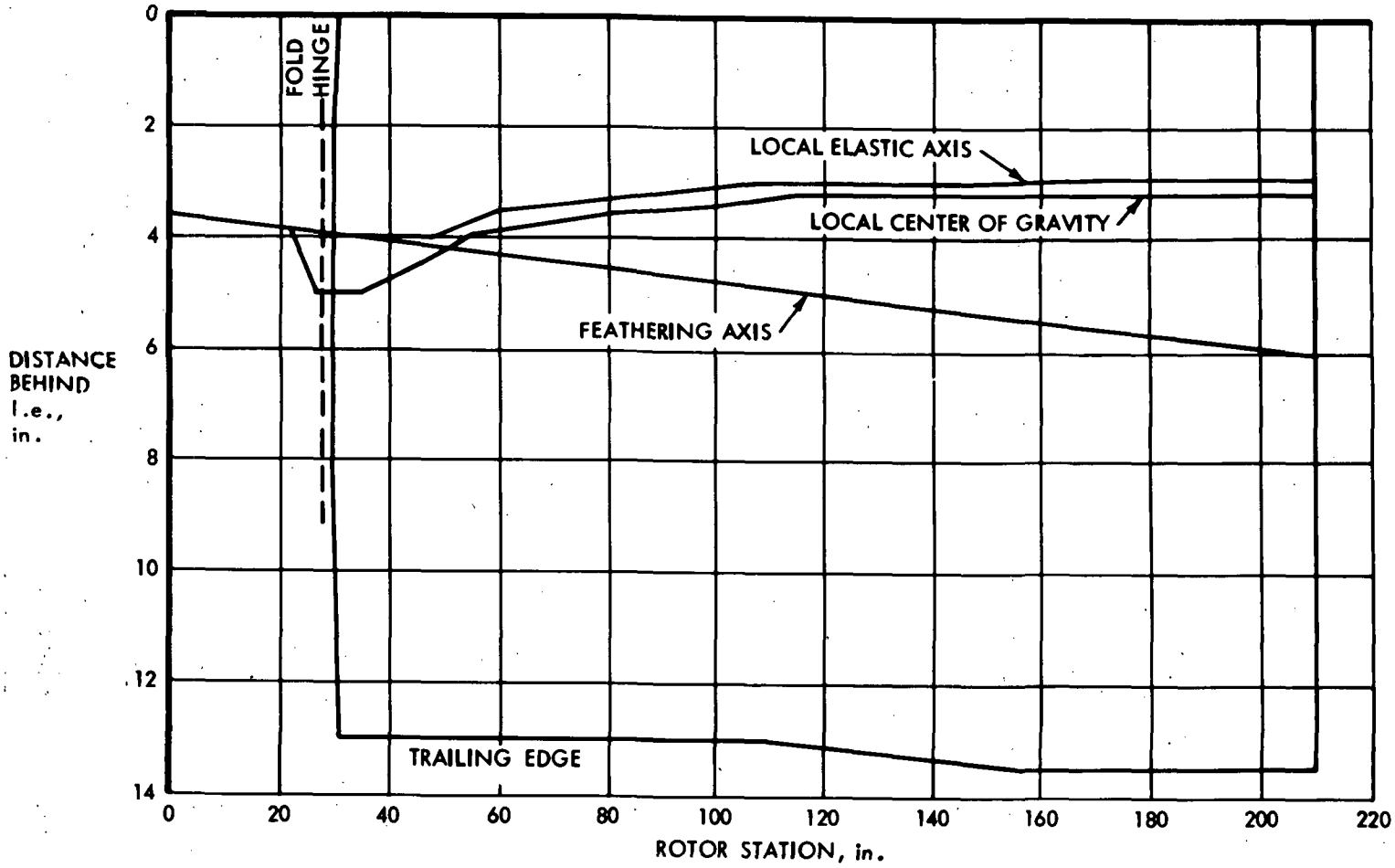


Figure 21. Blade Radial Distribution of Elastic Axis, Center of Gravity, and Feathering Axis Relative to the Leading Edge for the XH-51A Compound Helicopter Rotor

The modifications to the NACA 0012 airfoil consisted of a flattening of the trailing edge region and a small trailing edge tab addition. The modifications are not expected to significantly alter the aerodynamic properties of the section.

Blade mass and stiffness distributions. - The distribution of blade mass and stiffness along the rotor radius is presented in Figures 22 through 25. The moment of inertia of the blade about its quarter-chord locus is not known but an estimate of its magnitude might be made based on the blade weight of 86 lb outboard of the fold line shown in Figure 21 and an estimate of the distribution of this mass in the chordwise direction.

Gyroscope and swashplate data. - The gyroscope rotates at rotor speed and is geared, through a mechanical advantage, to the feathering axis of the blades. Tilt of the swashplate and gyroscope causes the blades to feather cyclically but not parallel to the swashplate, or with a cant angle $\psi_o = 90^o$, but at a smaller cant angle. In addition the swashplate is lightly restrained by symmetric springs to the fuselage and lightly damped by swashplate dampers. The following parameters describe the gyroscope to blades and swashplate condition.

Gyroscope polar moment of inertia	$2I_G = 7.5$ slugs ft^2
Gyroscope rpm	Ω_G= rotor rpm
Cant angle	$\psi_o = 45$ degrees
Mechanical advantage	$k = 1.4$
Swashplate stationary axis damping	$C_s = 21$ ft.lb/rad/sec
Swashplate springs to ground	$K_s = 77.5$ ft.lb/rad

Airframe geometry, aerodynamics and inertia. - The geometry of the airframe is shown in Figure 26. It should be noted that the rotor is tilted 6 degrees ahead of a normal-to-the-fuselage reference line. The projection of the point, at which the shaft axis intersects the rotor disk, along the normal to the fuselage reference line is defined as fuselage station 100. The reference position for center of gravity location, however, is the shaft axis. C.g. position is the distance perpendicular to the shaft axis.

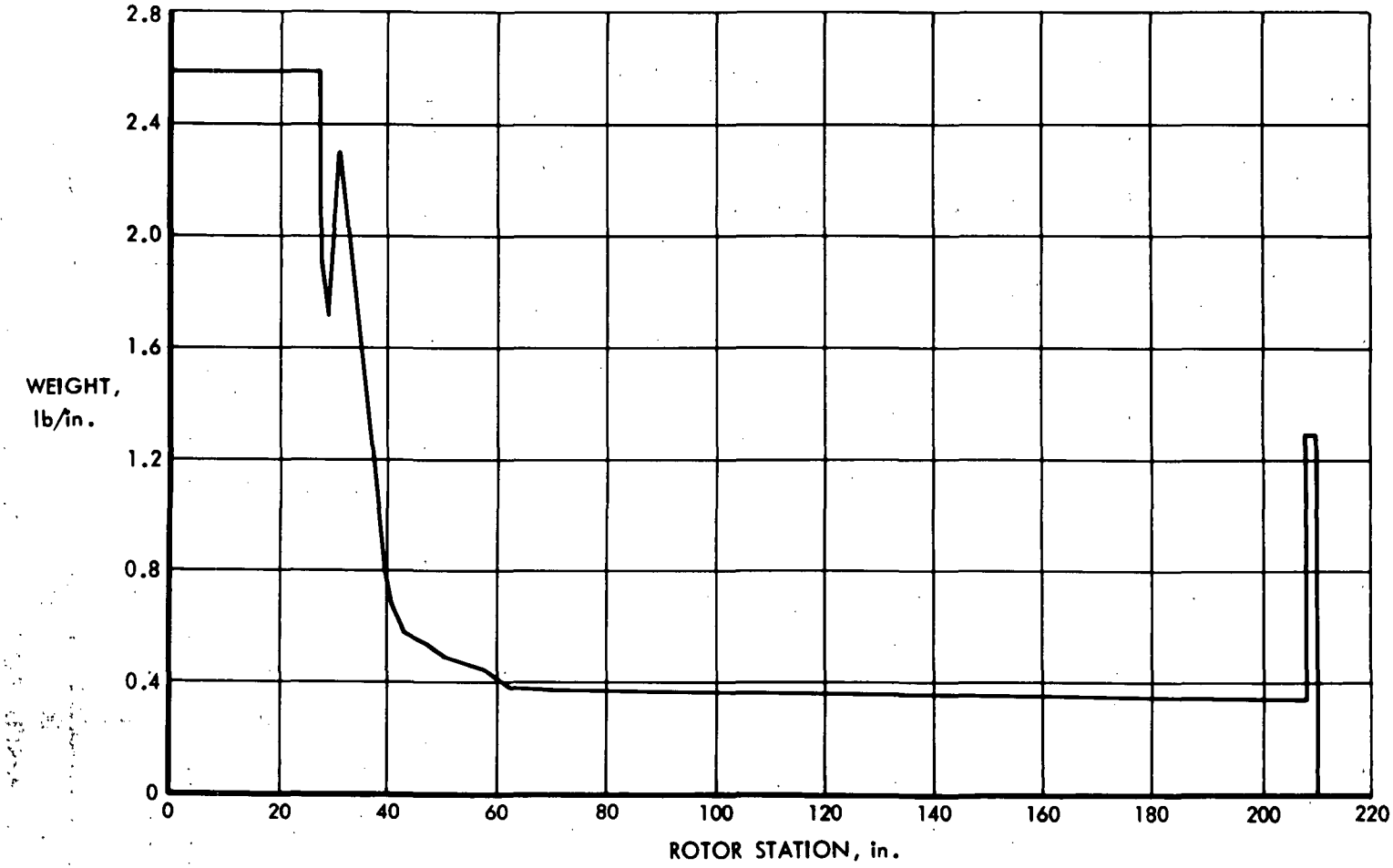


Figure 22. Blade Radial Distribution of Weight for the XH-51A Compound Helicopter Rotor

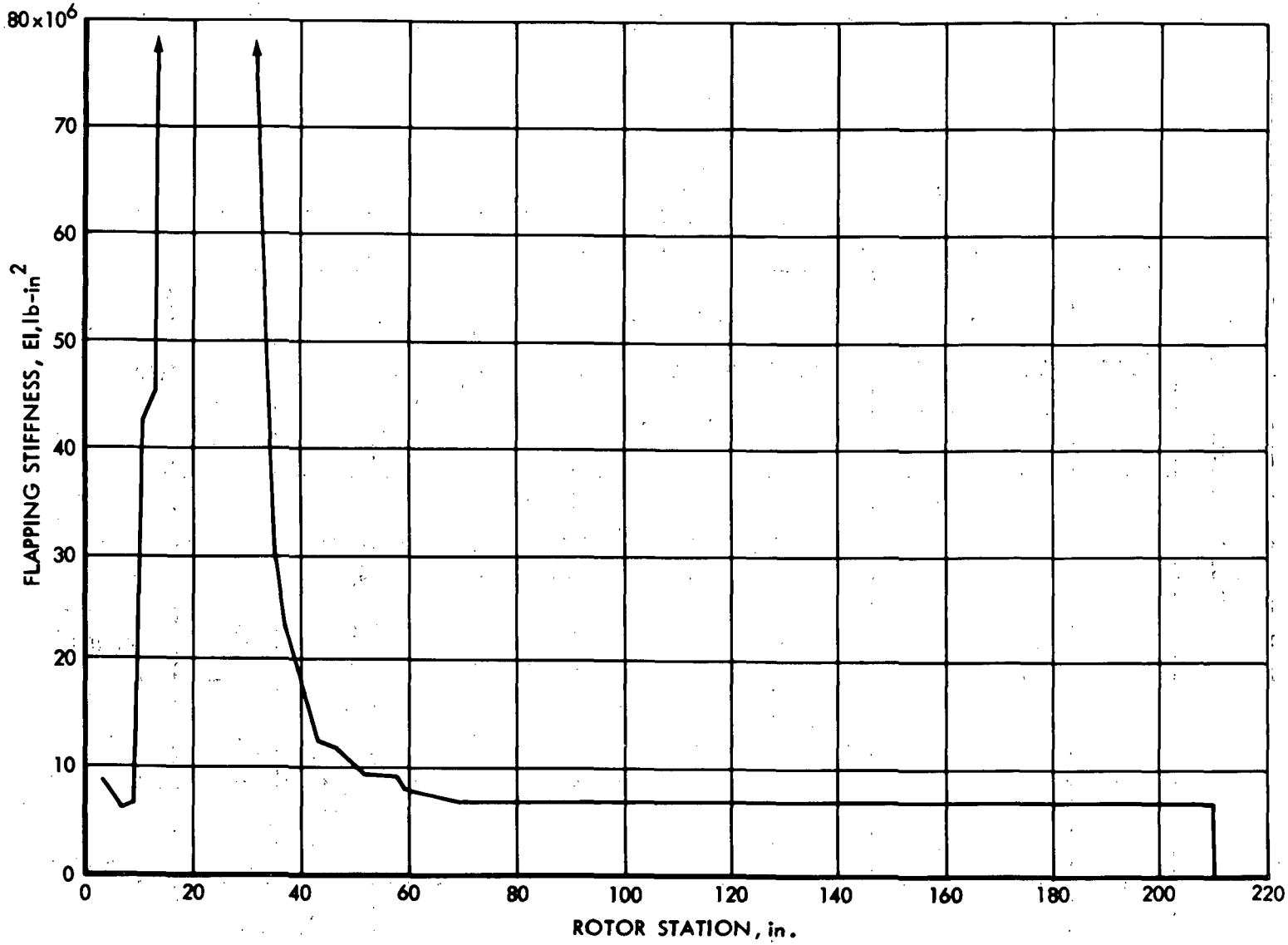


Figure 23. Blade Radial Distribution of Flapping Stiffness for the XH-51A Compound Helicopter

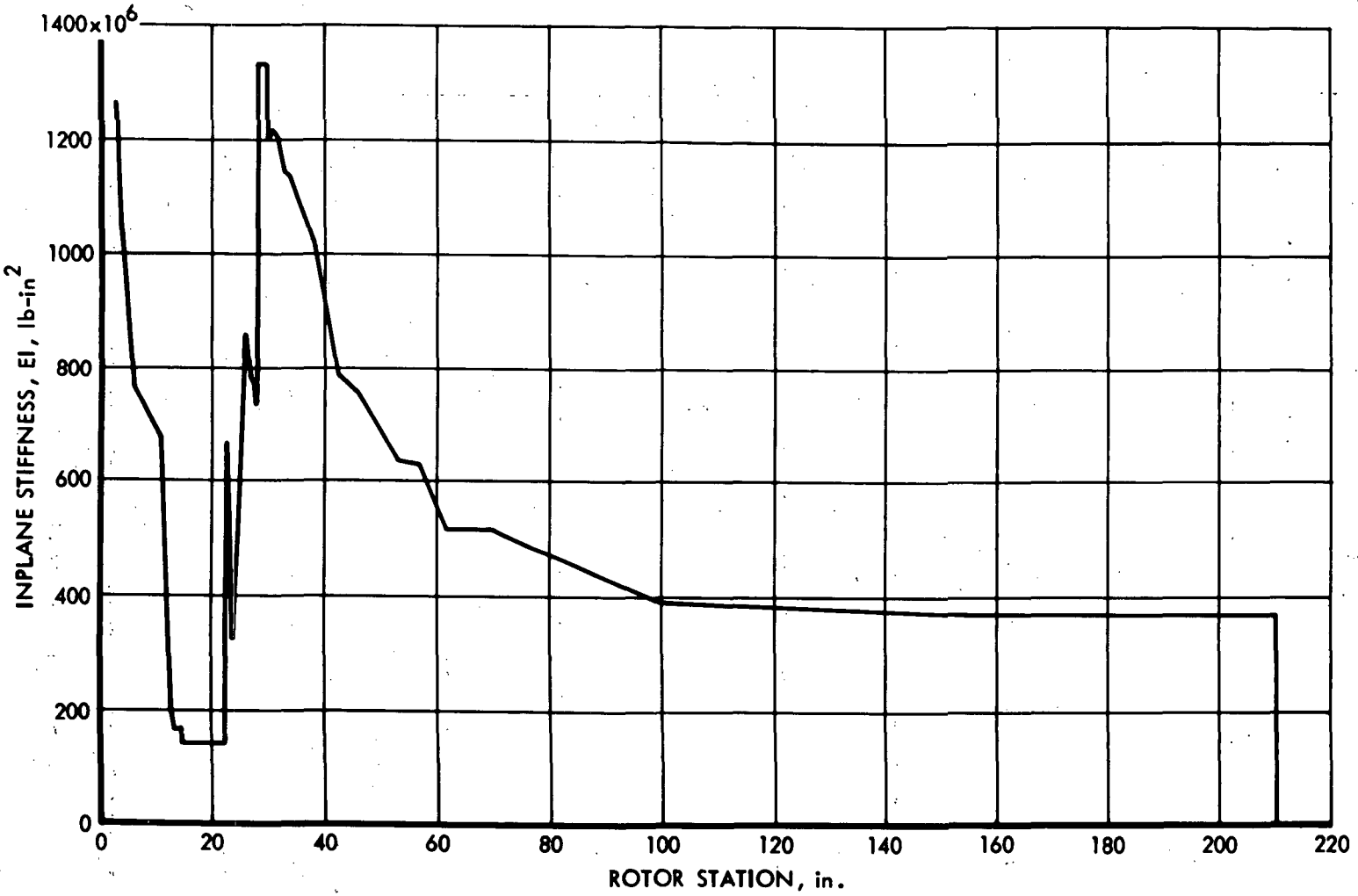


Figure 24. Blade Radial Distribution of In-Plane Stiffness for the XH-51A Compound Helicopter

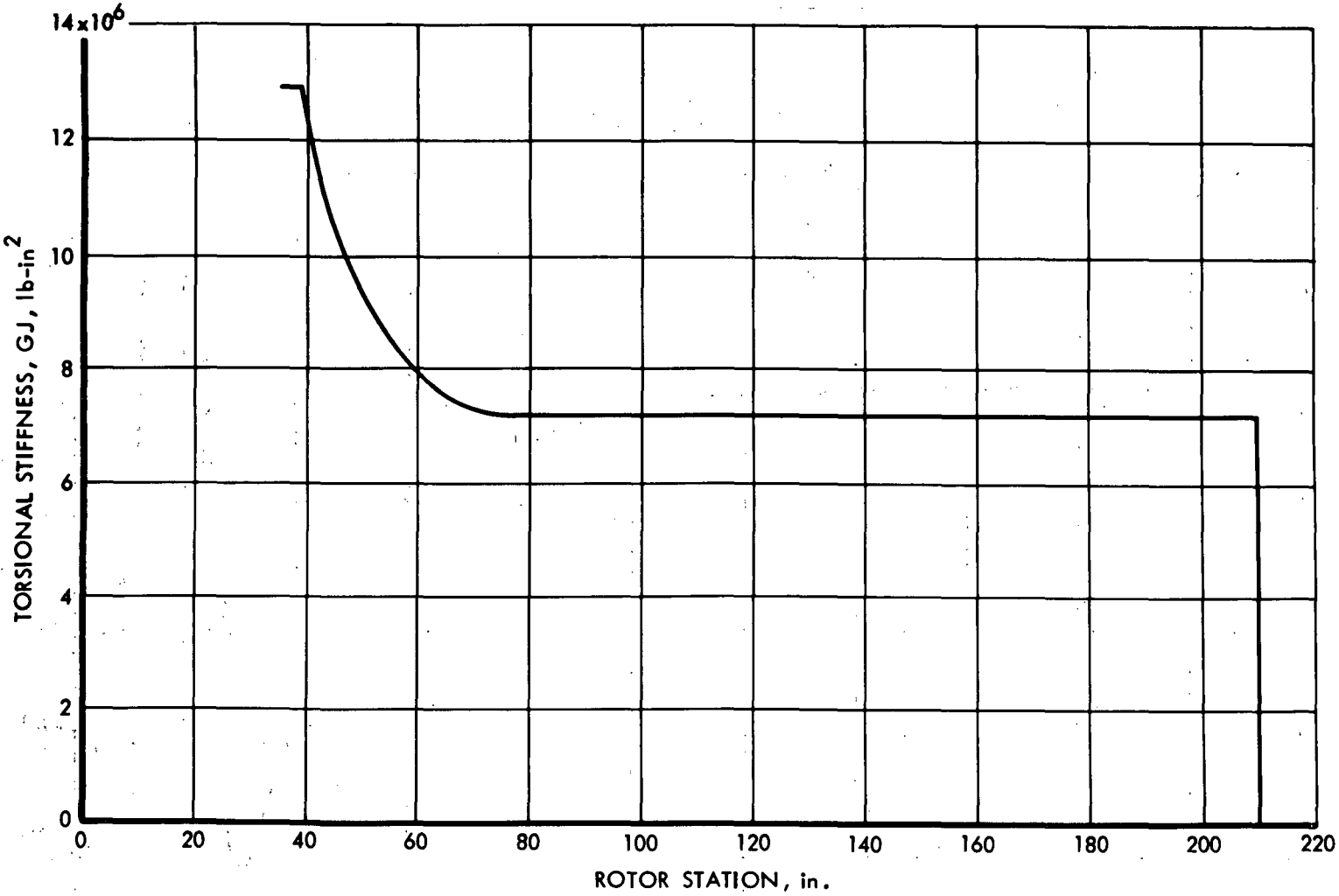


Figure 25. Blade Radial Distribution of Torsional Stiffness for the XH-51A Compound Helicopter

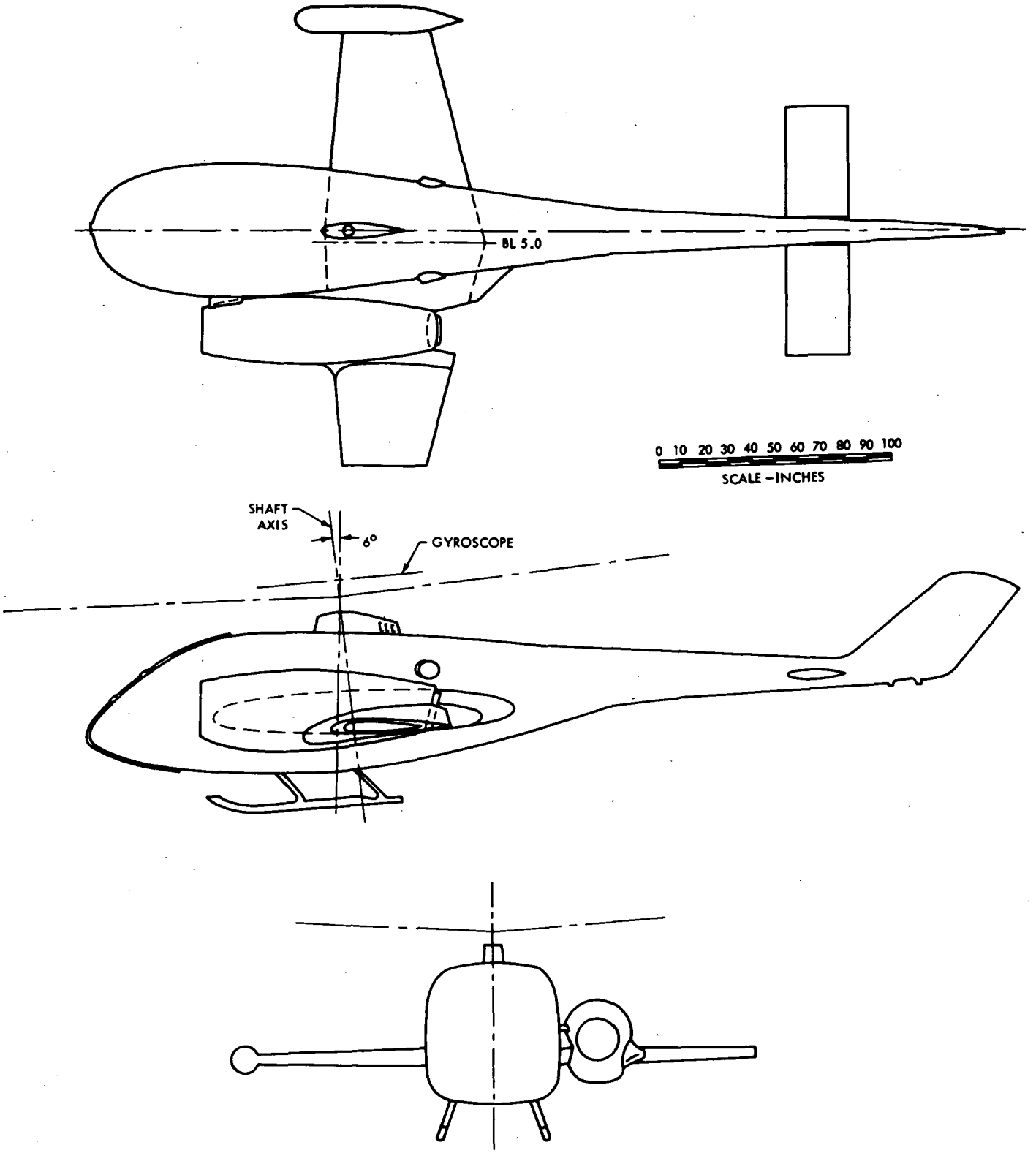


Figure 26. XH-51A Compound Helicopter Airframe General Arrangement

The configuration consists of a fuselage with a drooped nose, a single engine nacelle, and a wing and horizontal tail plane. An indications of the wing asymmetry can be gained by noting that the wing zero buttock line is 5.0 inches to the left of the fuselage centerline.

The geometry of the wing is summarized as follows:

Span	16.83 ft
Taper ratio	.5
Area	70 ft^2
Aspect ratio	4.05
Sweepback (.25c)	0
Chord (M.A.C.)	51.72 inches
Airfoil	NACA 23011
Incidence	-.9 degree

The geometry at the tail plane is as follows:

Span	108 inches
Chord	26.4 inches
Area	19.8 ft^2
Aspect ratio	4.1
Airfoil section	NACA 0015
Incidence	-0.25 degree
Tip weight	8 lb/side

Aerodynamic derivatives of the wing-body-nacelle-tail configuration have been estimated theoretically and in some cases checked by experiment. The derivatives are relative to conventional aircraft axes, i.e., positive directions are as follows X forward, Y laterally to the right, and Z down. Roll and pitch moments are consistent with this right-handed system, for example, positive pitch moments are nose up about the Y-axis which is located by having to pass through the shaft axis of rotation.

$Z_\alpha = -280\ q_a$ lb/radian

$M_\alpha = -91\ q_a$ ft-lb/radian

$$M_{\dot{\alpha}} = -9250 \frac{q_a}{V} \quad \text{ft-lb/radians/sec}$$

$$M_q = -14{,}890 \frac{q_a}{V} \quad \text{ft-lb/radians/sec}$$

$$L_p = -3890 \frac{q_a}{V} \quad \text{ft-lb/radians/sec}$$

where V = aircraft forward speed ft/sec

q_a = aircraft forward speed dynamic pressure

α = rotor angle of attack radians

q = pitch rate rad/sec

p = roll rate rad/sec

The trimming, forcing aerodynamic, jet engine force term, rotor downwash forcing term and c.g. gravitational force term occupying the right-hand side of the differential equations are estimated to be as shown on page 39.

The vertical force, roll, and pitch moment error terms Z_{error}, L_{error}, and M_{error} are employed to compensate for any errors that would result in lack of balance within a certain flight condition.

The form of the airframe inertia coefficients is shown in Volume I. The gross weight and moments of inertia about nominal axes are as follows:

Design gross weight	4500 lb
Takeoff gross weight, neutral c.g.	5165 lb
Takeoff gross weight, forward c.g.	5275 lb

Roll mass moment of inertia (including rotor)	1500 slug ft^2
Pitch mass moment of inertia (including rotor)	3150 slug ft^2
Yaw mass moment of inertia (including rotor)	3800 slug ft^2

The center of gravity shift under different loading conditions is shown in the following:

Summary of Terms on the Right-Hand Side of the Airframe Equations

$$\text{Pitch} \quad \{M\} = \Delta x_{c.g} nW + M_{\alpha} \cdot \alpha_{gust} + M_{\alpha=0} + \frac{dM}{dF_N} \cdot F_N + \Delta M_o(q_a) + M_{error}$$

$$\text{Roll} \quad \{L\} = -\Delta y_{c.g} nW - L_{\alpha} \cdot \alpha_{gust} - L_{\alpha=0} - \frac{dL}{dF_N} \cdot F_N - \Delta L_o(q_a) - L_{error}$$

$$\text{Plunge} \quad \{Z\} = - nW - Z_{\alpha} \cdot \alpha_{gust} - Z_{\alpha=0} - \frac{dZ}{dF_N} \cdot F_N - \Delta Z_o(q_a) - Z_{error}$$

$$= \Delta x_{c.g.} nW + (-91 q_a)\, \alpha_{gust} + (-18 q_a) + 2.16\, F_N - \frac{38{,}500}{q_a} + M_{error}$$

$$= -\Delta y_{c.g} nW - 0 - 0 - 1.81\, F_N - \left(\frac{-43{,}000}{q_a}\right) - L_{error}$$

$$= - nW - (280\, q_a)\, \alpha_{gust} - (-31\, q_a) - 0 - 0 - Z_{error}$$

NOTE:			
	Gust angle-of-attack	α_{gust}	radians
	Jet engine thrust	F_N	lb
	Center of gravity position	$\Delta x_{c.g.}$; $\Delta y_{c.g.}$	ft
	Aircraft gross weight	W	lb

CENTER OF GRAVITY POSITIONS

Gross Weight (lb)	Fuel Loading Condition	Neutral c.g.		Forward c.g.	
		Inches $\Delta x_{c.g.}$	Inches $\Delta y_{c.g.}$	Inches $\Delta x_{c.g.}$	Inches $\Delta y_{c.g.}$
4800	Full fuel (700 lb)	- .32	- 4.1	- 1.98	- 4.1
4580	Main Fuel (480 lb)	+ .32	- 5.05	- 1.32	- 5.05
4100	Zero fuel	0	- 5.1	- 1.68	- 5.10

Sign convention:

$\Delta x_{c.g.}$ + indicates aft displacement

$\Delta y_{c.g.}$ + indicates right displacement

NOTE: These must be converted to feet before being used in the equations of Volume I.

Rotor vibration modes. - The theoretical variation of the natural frequencies of the single blade vibration modes of the 35-foot, 4-blade rotor of the XH-51A compound helicopter are shown in Figure 27. The low ratio of blade first flap frequency to rotor rotation rate, P = 1.11, at 100% rpm should be noted.

The theoretical mode shapes associated with first and second blade flapping, first in-plane and first torsion modes are shown in Figures 28 through 30. A comparison of the first flapping mode shape with a linear mode (or rigid blade, root hinged) and the parabolic mode employed in the analyses of Volume I shows it to lie almost midway between the two approximate shapes. It would be expected, therefore, that neither approximate mode would yield answers very close to experiment for this very flexible blade.

At zero rpm, on the other hand, the calculated first flap mode shape rather closely approximate a parabola, as shown in Figure 31. The figure also shows experimental confirmation of the theoretically predicted shapes of the higher flapping modes. The 35-foot 4-blade rotor of the XH-51A

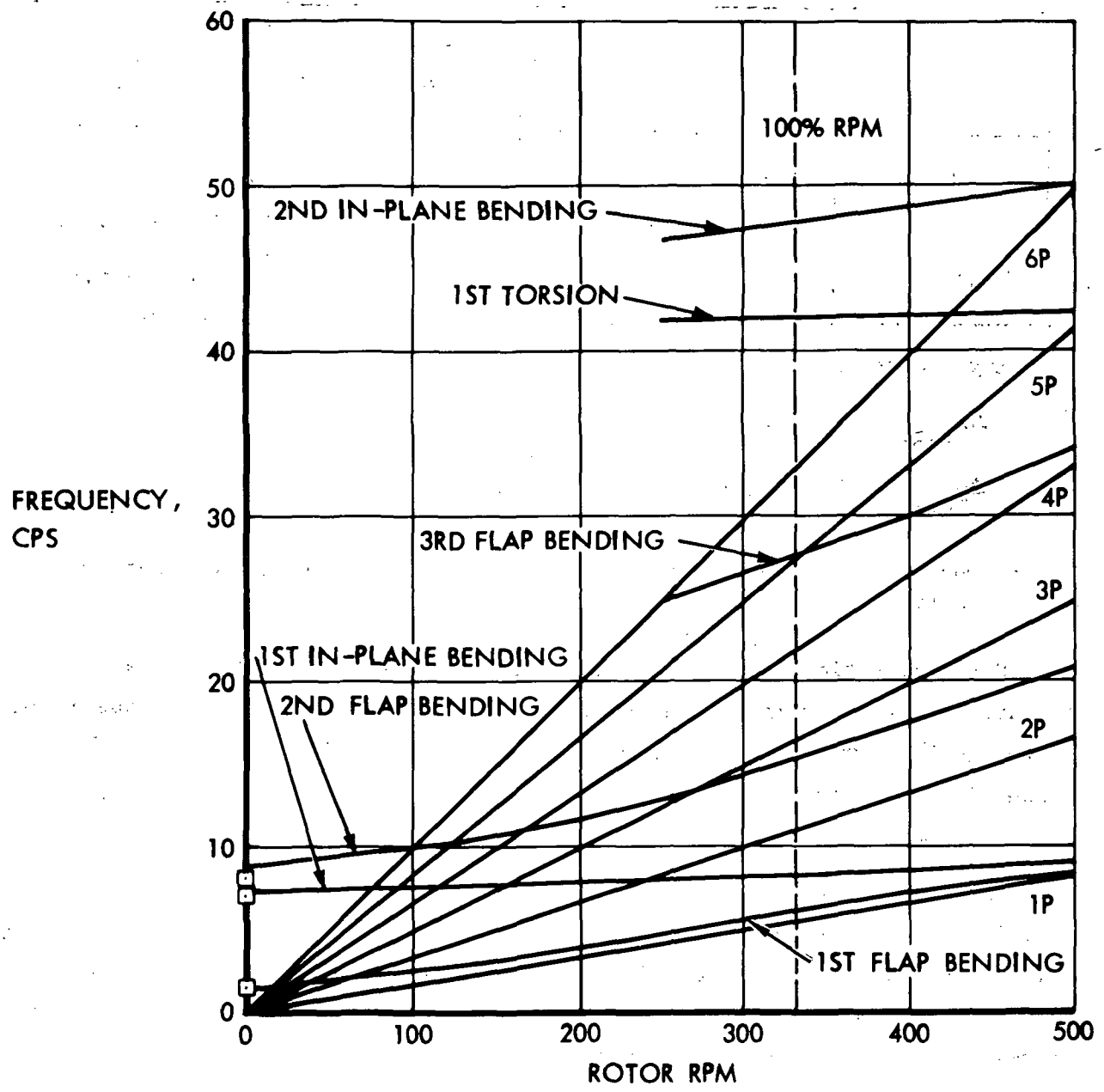


Figure 27. Single Blade Natural Frequency Variation with rpm for the XH-51A Compound Helicopter

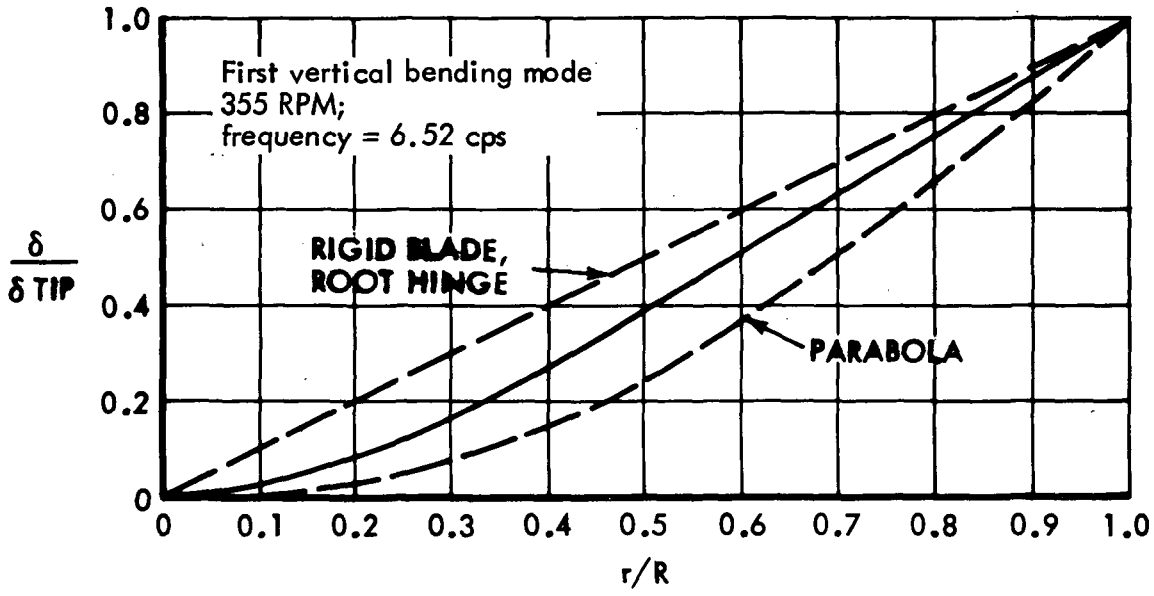


Figure 28. Theoretical Single Blade Flap Bending Mode Shapes at 355 rpm for the XH-51A Compound Helicopter

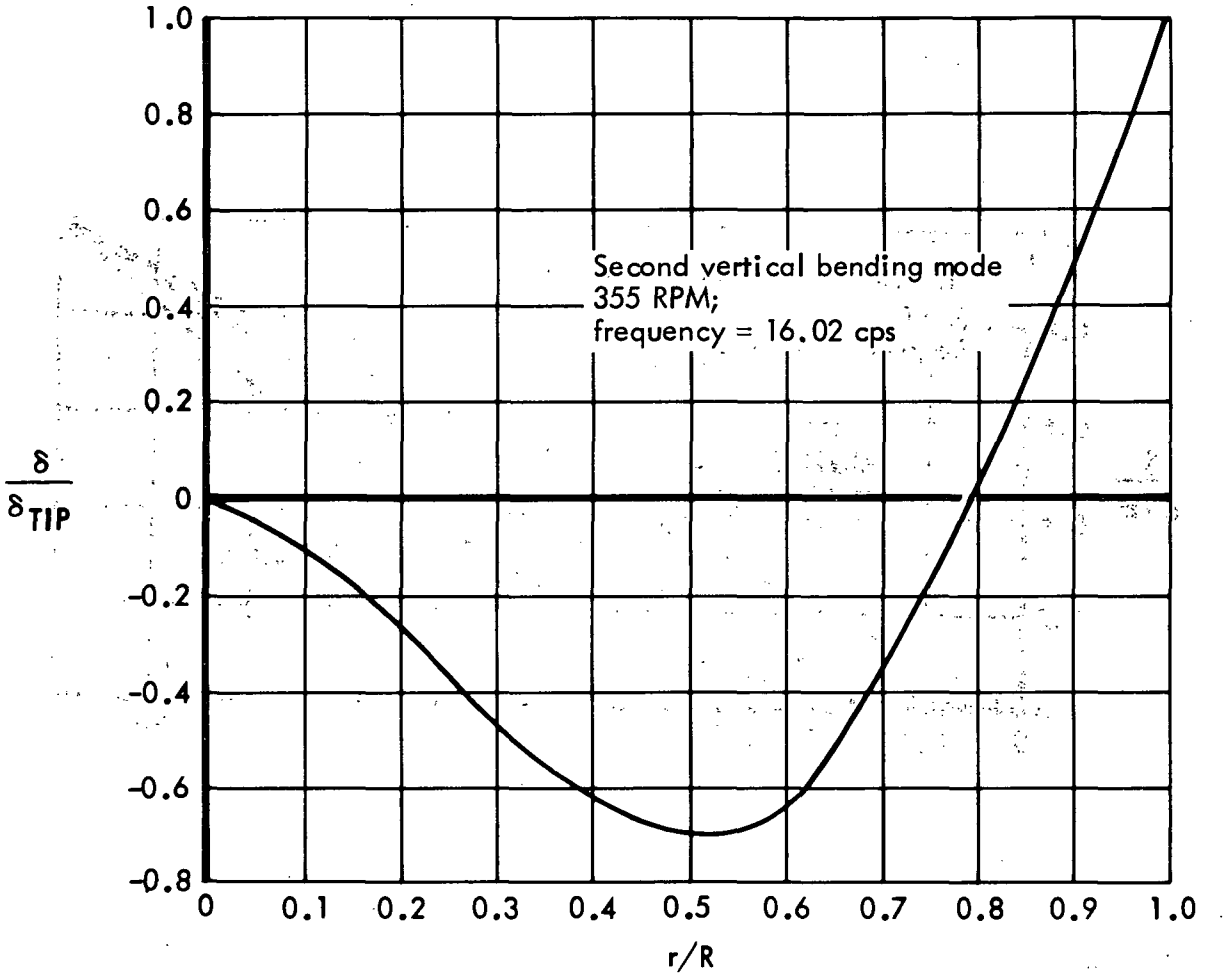
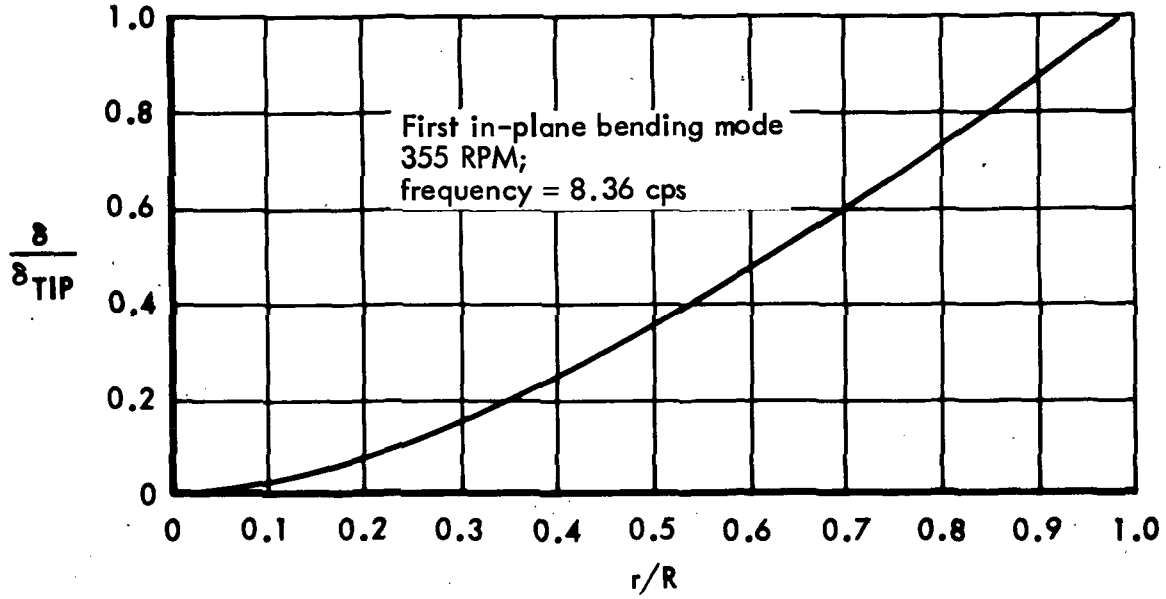


Figure 29. Theoretical Single Blade Flap Bending Mode Shapes at 355 rpm for the XH-51A Compound Helicopter



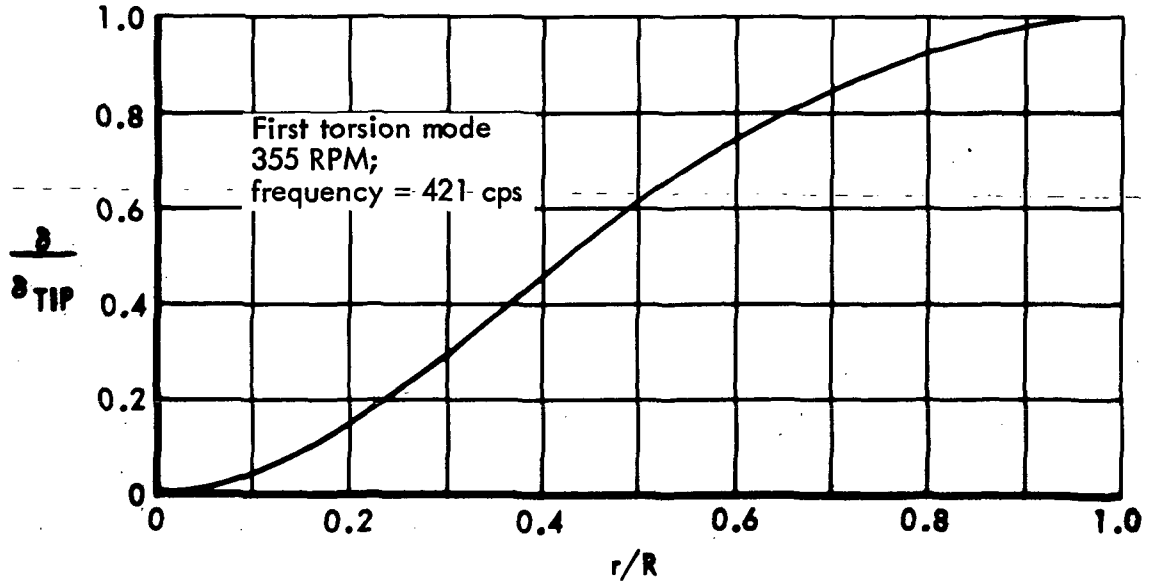


Figure 30. Theoretical Single Blade First In-Plane and Torsion Modes for the XH-51A Compound Helicopter

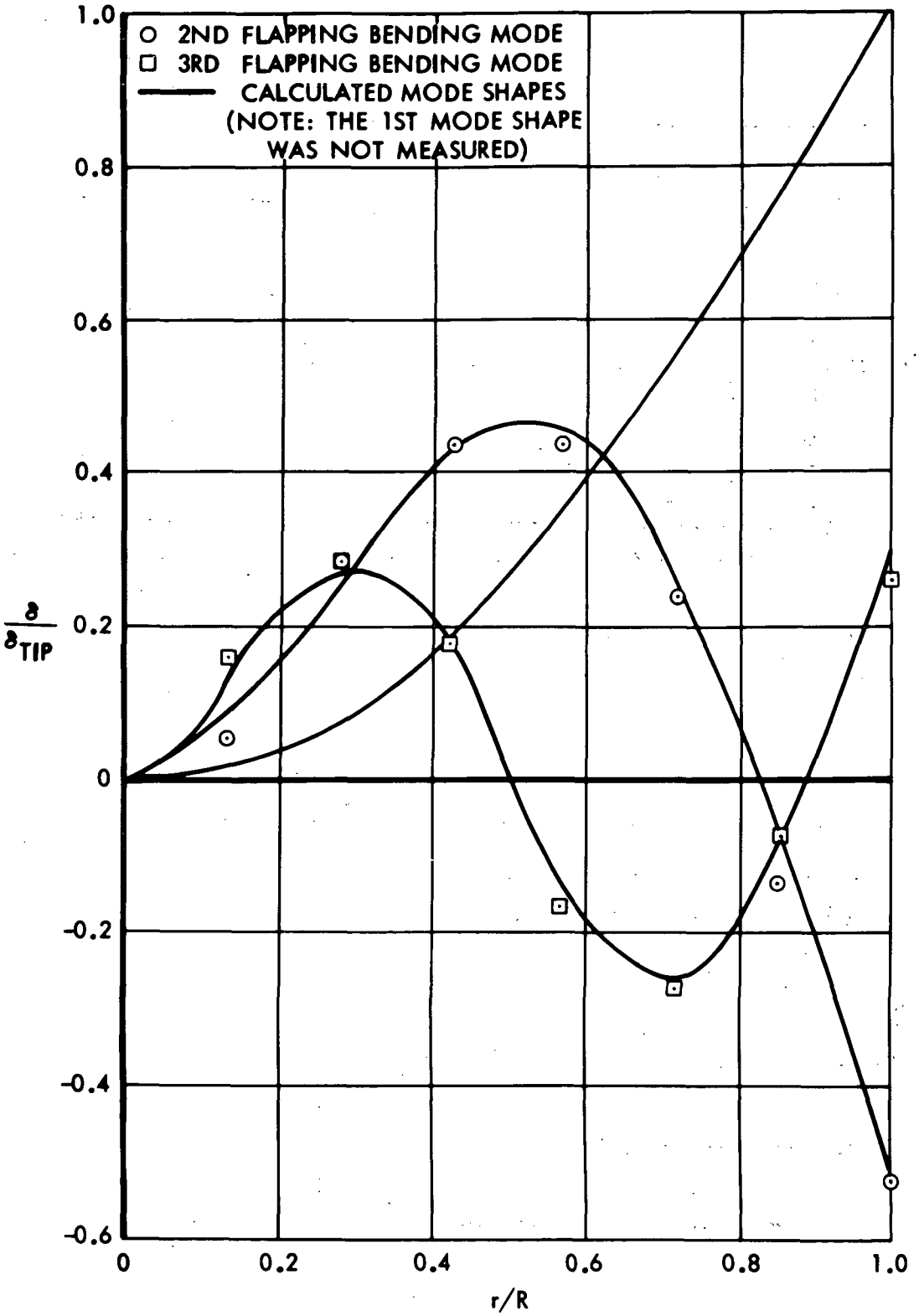


Figure 31. Comparison of Theoretical and Experimental Single Blade Flapping Mode Shapes at Zero rpm for the XH-51A Compound Helicopter

compound helicopter calculated and experimentally measured rotor and blade natural frequencies occurring at zero rotor rpm at various collective pitch settings are shown in the following table:

Natural Frequency, Nonrotating (c.p.s.)							
Mode Description	$\theta_o = .5^\circ$ Theory	3.75° Test	10° Test	10° Theory	10.5° Theory	11.5° Test	17.75° Test
First In-plane (Blades Opposing)	8.2	8.29	7.14	7.09	7.38	7.22	6.51
First In-plane (Blades in-phase)		7.03	--			--	--
Second In-plane	41.7	46.5			41.7	--	--
First Vertical Bending	1.51	1.5	1.5	1.48	1.56	1.5	1.5
2nd Vertical Bending	8.40	7.85	8.23	8.51	8.78	8.16	8.96
3rd Vertical Bending		--	19.58	18.6		--	--
1st Torsion	50.7	24.4	25.6		44.8	--	24.4

TEST CONDITIONS

The previous section described the physical properties of the rotor system in detail. This section describes the conditions under which the rotors were tested. The 33-foot and 7.5-foot rotors were tested in wind tunnels and the 35-foot rotor in free flight. A set of test conditions specifies the values of the variables which are under the control of the experimenter. (In the case of a free flight vehicle, body motions and control position are not independent of each other.) A typical set might be as follows:

Rotor rotation rate	Ω
Wind speed	V
Air density	ρ
Body pitch rate	$\dot{\Theta}$
Body roll rate	$\dot{\Phi}$
Body normal acceleration	$\ddot{z}$
Cyclic pitch	θ_{lc}, θ_{ls}

Collective pitch θ_o

Rotor angle-of-attack α

In addition, a summary is made of the dimensions and basic properties, in nondimensional form, of each rotor.

33-Foot 3-Blade Rotor

The fundamental geometric properties of the 33-foot 3-blade rotor are summarized below, for reference:

Effects of Configuration Element	Element		Magnitude
Basic Rotor and Size	Number of blades	b	3
	Solidity	σ	0.0675
	Radius	R	16.5 ft
Swashplate Forces	Sweep angle	Λ	.0262 radians
	Mechanical advantage	k	1.14
	Cant angle	ψ_o	60 degrees
	Sweep ratio	$\frac{b\Lambda}{\sigma}$	1.163
External Forces	Blade twist rate	θ_t	- .571 degrees/ft.
	Blade precone	β_o	2.25 degrees

The conditions for the 29 cases tested on the 33-foot 3-blade rotor are summarized in Table I.

7.5-Foot 4-Blade Rotor

The fundamental geometric properties of the 7.5-foot rotor are summarized as follows:

Element		Magnitude
Number of blades	b	4
Solidity	σ	.127
Radius	R	3.75 ft

Table II contains the blade aerodynamic, mass, and stiffness conditions tested in the U.S. Army's AMRDL 10-foot wind tunnel at the Ames Research Center. In addition, the actual values of rpm and tunnel speed together with the ranges of angle-of-attack, cyclic pitch and collective pitch tested at each condition are shown. This data taken from Reference 4.

35-Foot 4-Blade Rotor

Reference 2, Volumes I, II, and III, contains a body of reduced flight recorded data concerning blade flap bending moment and section lift variation with azimuth. The data is of good quality and covers compound helicopter flight from hover to lightly loaded rotor flight at advance ratio in excess of $\mu = .6$.

The utility of the data is improved, however, if additional information about the flights and the rotor itself are made available. A previous section of this report furnished the information about the rotor - gyroscope - airframe system and this section furnishes new flight information such as air density, speed of sound, rotor rpm, cyclic pitch, pitch, and roll rate.

The new information is included with key data already published in Table III, ref. (2). Only data for the 11 flight cases having advance ratio greater than $\mu = .3$, and a full set of reduced experimental results are included in the table.

The fundamental rotor and swashplate geometric properties of the XH-51A compound are summarized below:

Effects Of Configuration Element	Element		Magnitude
Basic Rotor and Size	Number of blades	b	4
	Solidity	σ	.0818
	Radius	R	17.5 ft
Swashplate Forces	Sweep angle	Λ	.0244 radians 1.4 degrees
	Mechanical advantage	k	1.4
	Cant angle	ψ_o	45 degrees
	Sweep ratio	$\frac{b\Lambda}{\sigma}$	1.195
External Forces	Blade twist rate	θ_t	- .286 degrees/ft
	Blade precone	β_o	3.2 degrees
	Droop		- 1.0 degrees

TABLE I. 33-FOOT 3-BLADE ROTOR - WIND TUNNEL TEST CONDITIONS

Test No.	Type of Test	Rotation Rate		Wind Speed		Air Density	First Flap Dynamics			Swashplate Dynamics			Cycle Pitch Range		Collective and Angle-of-Attack	
		RPM	Ω rad/sec	Knots	V fps	ρ slugs/ft^3	μ	P	γ	γ_f	k_{cr}	k_{cs}	degrees θ_{IC}	degrees θ_{IS}	θ_o	α^o
1	Fixed Swashplate	98.7	10.34	49.38	83.4	.0023	0.489	2.06	4.57	-	-	-	.382 2.616	-2.336 .701	1.5	0
2	↑	60.8	6.37	48.04	81.1	↑	0.772	3.05	↑	-	-	-	-.115 4.219	-3.437 .780	↑	↑
3	↓	46.3	4.85	50.03	84.5	↓	1.056	3.90	↓	-	-	-	1.162 5.041	-4.198 .073	↓	↓
4	↑	147.9	15.49	60.91	102.9	↑	.403	1.56	↑	-	-	-	.217 3.234	-2.9 1.502	↑	↑
5	↓	73.3	7.68	59.96	101.3	↓	.800	2.61	↓	-	-	-	.517 3.402	-3.539 .665	↓	↓
6	↑	52.7	5.52	60.02	101.4	↑	1.113	3.47	↑	-	-	-	.274 4.877	-5.098 1.012	↑	↓
7	↓	137.4	14.39	69.19	116.9	↓	.492	1.64	↓	-	-	-	.080 2.000	-2.661 .710	↓	0
8	↑	135.3	14.17	68.45	115.6	↑	.495	1.65	↑	-	-	-	.681 3.359	-2.744 .872	↑	1.5°
9	↓	86.4	9.05	69.30	117.0	↓	.784	2.28	↓	-	-	-	.322 2.760	-2.087 .342	↓	0
10	↑	60.2	6.30	69.40	117.2	↑	1.127	3.08	↑	-	-	-	1.450 4.161	-3.429 -.469	↑	↑
11	↓	34.2	3.58	68.66	116.0	↓	1.962	5.16	↓	-	-	-	1.397 5.470	-3.003 .311	↓	↓
12	↑	197.2	20.65	80.59	136.1	↑	0.399	1.35	↑	-	-	-	.529 3.141	-2.970 .792	↑	↑
13	↓	153.2	16.04	82.76	139.8	↓	0.528	1.53	↓	-	-	-	.240 2.869	-3.514 -.277	↓	↓
14	↑	100.2	10.49	82.78	139.8	↑	0.808	2.03	↑	-	-	-	.736 3.266	-2.931 .469	↑	↑
15	↓	72.1	7.55	82.68	139.6	↓	1.121	2.64	↓	-	-	-	1.563 3.907	-3.362 .823	↓	↓
16	Fixed Swashplate	38.0	3.98	82.88	140.0	↑	2.132	4.67	↑	-	-	-	1.981 4.822	-3.758 -.379	↑	↑
17	Free Swashplate	197.2	20.65	81.67	137.9	↑	0.405	1.35	↑	4.80	.025	.285	.177 3.580	-3.248 .312	↑	↑
18	Free Swashplate	152.6	15.98	81.26	137.2	↑	0.521	1.53	↑	3.72	.032	.367	-.003 3.971	-3.391 .959	↑	↑
19	Fixed Swashplate	177.7	18.61	89.80	151.7	↑	0.494	1.41	↑	-	-	-	.362 3.573	-2.0 .199	↑	↓
20	↑	81.4	8.52	89.37	150.9	↑	1.073	2.39	↑	-	-	-	1.101 2.561	-2.178 .090	↑	0
21	↑	81.0	72.1	89.56	151.3	↑	1.081	2.40	↑	-	-	-	1.388 3.938	-3.162 .622	↑	1.0°
22	↑	42.7	4.47	88.28	149.1	↑	2.04	4.20	↑	-	-	-	1.890 4.316	-5.449 -2.207	↑	0
23	↓	242.6	25.41	101.91	172.1	↓	0.41	1.25	↓	-	-	-	.721 3.016	-2.441 -.153	↓	↑
24	Fixed Swashplate	194.1	20.33	101.87	172.1	↓	0.513	1.36	↓	-	-	-	.372 2.531	-2.900 -.482	↓	↓
25	Free Swashplate	243.4	25.49	102.93	173.8	↓	0.413	1.25	↓	5.88	.020	.231	.729 2.427	-1.755 -.200	↓	↓
26	↑	193.1	20.22	102.85	173.7	↓	0.521	1.36	↓	4.70	.026	.291	.892 3.210	-2.541 .085	↓	↓
27	↑	322.4	33.76	120.54	203.6	↓	0.365	1.18	↓	7.75	.015	.174	.675 1.936	-1.856 -.527	↓	↓
28	↑	232.9	24.39	119.92	202.5	↓	0.503	1.27	↓	5.64	.021	.241	.994 2.993	-2.744 -.145	↓	↓
29	Free Swashplate	148.8	15.58	119.98	202.6	.0023	0.788	1.56	4.57	3.63	.033	.377	1.336 3.649	-2.169 -.967	1.5	0

NOTE: At each test condition, 10 to 16 different cycle pitch combinations were tested.

TABLE II. 7.5-FOOT 4-BLADE ROTOR WIND TUNNEL TEST CONDITIONS

Config.	Rotation Rate		Wind Speed		Air Density	First Flap Dynamics			Controls and Rotor Position Ranges			
	RPM	Ω rad/sec	Knots	V ft/sec	ρ slugs/ft^3	μ	P	γ	θ_{1C} degrees	θ_{1S} degrees	θ_0 degrees	α degrees
1	800	83.7	54.0	91.0	.0023	0.29	1.33	5.0	-1.2377 4.5725	-4.441 3.129	0 3.971	-3.003 0
			74.4	125.5		0.40			-1.868 4.378	-	-	-3.003 0
			100.2	169.3		0.54			-1.410 4.189	-2.218 1.381	0 2.418	-3.003 0
	800	83.7	123.0	207.2		0.66	1.33		-1.008 3.673	-2.189 .831	0 1.942	-3.003 0
	550	57.5	55.0	92.7		0.43	1.56		-	-	-	-3.003 0
			74.0	125.0		0.58			1.209 2.361	1.461 3.959	-.011 3.438	-3.003 0
			100.6	170.2		0.79			-1.169 3.512	-2.831 .923	-.017 2.441	-3.003 0
	550	57.5	122.8	207.0		0.96	1.56		-.533 2.842	-2.132 .647	0 1.931	-3.003 0
	300	31.4	54.4	91.9		0.78	2.32		-4.361 4.160	-6.223 3.329	0 4.922	-3.003 0
			74.6	126.0		1.07			-3.289 4.120	-4.401 2.109	0 4.00	-3.003 0
			100.5	169.7		1.44			-1.610 3.432	-2.481 1.473	0 2.441	-3.003 0
1	300	31.4	122.0	206.0		1.75	2.32		-	-	0 1.473	-3.003 0
3	800	83.7	54.0	91.0		0.29	1.55		-2.149 3.799	-3.472 1.988	0 4.011	-3.003 0
			74.5	125.7		0.40			-1.117 3.312	-3.512 .871	.011 2.939	-3.003 0
			100.3	169.7		0.54			-.923 3.237	-	-.011 2.023	-3.003 0
	800	83.7	122.6	207.0		0.66	1.55		-.682 3.570	-2.338 .493	.011 1.410	-3.003 0
	650	68.0	54.4	91.8		0.36	1.73		-2.378 3.959	-3.982 2.091	-.011 2.028	-3.003 0
			74.0	125.0		0.49			-1.759 3.919	-3.369 -.372	-.011 2.510	-3.003 0
			99.8	168.1		0.66			-.011 2.882	-2.492 1.008	-.017 1.518	-3.003 0
	650	68.0	121.0	204.0		0.80	1.73		.229 1.513	-1.060 .762	0 1.501	-3.003 0
	400	41.9	55.0	92.6		0.59	2.32		-3.312 4.710	-5.621 2.091	.051 5.002	-3.003 0
			74.5	125.8		0.80			-1.942 3.788	-3.902 1.008	-.029 3.982	-3.003 0
			100.5	169.7		1.08			-	-	-	-3.003 0
3	400	41.9	122.0	206.0	.0023	1.31	2.32	5.0	-	-	-	-3.003 0

TABLE III. XH-51A COMPOUND HELICOPTER FLIGHT TEST CONDITIONS

Test* No.	Gross Weight lb	c.g. Position inches Δx	c.g. Position inches Δy	Normal Load Factor	Rotation Rate RPM	Rotation Rate Ω rad/sec	Forward Speed (True) Knots	Forward Speed (True) V ft/sec	Air Density slugs/ft^3	Speed of Sound ft/sec	First Flap Dynamics μ	First Flap Dynamics P	First Flap Dynamics **γ	Swash Plate Dynamics γ_f	Swash Plate Dynamics k_{cr}	Swash Plate Dynamics k_{cs}	Body Motions Normal Acceleration $\ddot{z}$ ft/sec^2	Body Motions $\dot{\phi}$ rad/sec	Body Motions $\dot{\theta}$ rad/sec	Control and Rotor Positions, degrees θ_{IC}	θ_{IS}	θ_0	***α_{fus}
25	5100	-1.6	-4.1	1.08	357	37.4	163.5	276	.00235	1112	.422	1.10	6.15	18.7	-	.032	2.6	.012	0	1.24	-1.71	3.27	7.45
26	4980			1.05	355	37.2	207	349	.00231	1112	.536		6.05	18.4	-	.032	1.6	.012	0	1.02	-1.48	3.15	5.47
27	5110			1.15	355	37.2	227	383	.00231	1112	.589		6.05	18.4	-	.032	4.8	-	-.006	1.09	-1.16	3.24	4.20
31	4940			1.13	355	37.2	232	391.5	.00211	1103	.601		5.52	16.7	-	.036	4.2	.018	-.011	1.08	-1.11	3.34	4.80
33	5026			1.05	355	37.2	157	265	.00218	1080	.407		5.70	17.3	-	.035	1.6	.011	-.026	1.42	-2.36	3.37	10.5
36	5150			1.32	359	37.7	126	212.5	.00231	1112	.322		6.05	18.4	-	.033	10.3	.048	+.006	1.19	-2.15	3.52	11.63
37	5150			1.61	359	37.7	124	209	.00231	1112	.317		6.05	18.4	-	.033	19.6	.096	-.007	1.10	-2.19	3.76	13.44
39	5030			1.38	357	37.4	206	347	.00234	1111	.530		6.11	18.6	-	.033	12.2	.0192	0	1.25	-1.69	3.17	6.54
40	5096			1.63	355	37.2	206	347	.00235	1113	.533		6.15	18.7	-	.033	20.3	.062	-.019	1.21	-2.43	3.56	7.55
46	5140			1.34	359	37.7	161	272	.00231	1112	.412		6.05	18.4	-	.033	11.0	.0734	-.020	1.03	-1.89	3.60	8.70
50	4995	-1.6	-4.1	1.38	355	37.2	208	351	.00234	1111	.539	1.10	6.12	18.6	-	.033	12.2	.0574	-.007	1.08	-1.40	3.23	6.23

*Test number taken from reference (2).

**Based on section lift curve slope $a = 2\pi$.

***Rotor angle of attack $\alpha = \alpha_{fus} - 6.0°$

APPENDIX

ANALYSIS AND PRESENTATION OF EXPERIMENTAL DATA

Theoretical analyses disclosed important characteristics of each of the rotor systems tested. This section discusses the analyses performed on the experimental data to produce values of the characteristics for comparison with theory. Also discussed is the form of results presented. The form was as general as practical to simplify the theory comparison, to facilitate understanding of the basic physical processes in rotor systems and to make the results useful for helicopter preliminary design.

33-Foot, 3-Blade Rotor

The following measurements, made in each steady state test of the 33-foot rotor, were analyzed to determine rotor system characteristics.

a. Feathering pitch of each blade.

b. Rotating shaft bending moment, 11 inches below the disk plane.

c. Stationary axis shaft pitch and roll moments, 36 inches below the disk plane.

d. Stationary axis swashplate pitch and roll moment.

e. Blade bending moment at stations 43 and 118.

f. Blade in-plane bending at stations 21 and 69.

At each rpm, forward speed condition between 10 and 15 combinations of cyclic pitch were tested. Cyclic pitch components θ_{1_c} and θ_{1_s} were determined by analysis of the blade feathering pitch variation with azimuth and depended on an accurate marking of the zero azimuth position; number one blade aft.

Shaft-transmitted forces. – From the recordings of rotating shaft bending moment 11 inches below the disk, transformed to stationary coordinates, and stationary axis moments measured 36 inches below the disk, the

horizontal shaft shears and hub moments at the disk in stationary axes were determined as functions of azimuth.

Hub moment, swashplate moment, and shaft shear components were each harmonically analyzed into the following form for each combination of cyclic pitch tested.

$$F = F_0 + F_{1c} \cos\psi + F_{1s} \sin\psi + \ldots\ldots F_{10c} \cos 10\psi + F_{10s} \sin 10\psi$$

Theoretical considerations indicated that all terms but F_0, F_{3c}, F_{3s}, F_{6c}, F_{6s}..... would be zero and calculations showed that F_{6c}, F_{6s} and above of the non-zero terms would be very small. Experimental results did, in fact, confirm that F_{6c}, F_{6s} and above were negligibly small but they also showed F_{1c}, F_{1s}, F_{2c}, F_{2s}, were often quite large. These values must have been produced by aspects of the rotor not considered in the theory, such as lack of symmetry in the blades and perhaps offset mass centroid, etc. At any rate all terms were discarded but the F_0, F_{3c} and F_{3s}.

Appendix Table I contains the hub moment, swashplate moment, and shaft shear force mean and 3P components in dimensional form for each combination of cyclic pitch at each rpm, forward speed condition. Computer output labels are defined and units specified as follows:

Symbol		Computer Label	Units
θ_{1c}		T1C	degrees
θ_{1s}		T1S	degrees
Shaft roll bending	11 inches	Lsb	in-lb
Shaft pitch bending	below disk	Msb	in-lb
Shaft roll bending	36 inches	Llc	in-lb
Shaft pitch bending	below disk	Mlc	in-lb
L		Lh	in-lb
M		Mh	in-lb
X		Fx	lb
Y		Fy	lb
M_ϕ		Lsp	in-lb
M_θ		Msp	in-lb

The table also contains the deviations, denoted by d( ), of each experimental data point from an imaginary plane of its force or moment component versus θ_{1c} and θ_{1s} as determined by the constraint that the plane be positioned so that the square root of the sum of the squares of all the deviations from the plane is a minimum. The rms value of the deviation, leveled by SIGMA, is also shown.

The deviations furnish an indication of the linearity of the data. The data appears to be approximately linear with the deviations apparently due to random scatter.

The best fit plane through the data furnishes the experimental force and moment derivatives with respect to the two cyclic pitch components, and the residual values when $\theta_{1c} = \theta_{1s} = 0$. These data are also shown in Table I in dimensional form.

The causes of oscillations in stationary coordinates may be physical phenomena that exist primarily in the stationary coordinate system such as body longitudinal and lateral vibration modes.

If, for example, the source is body oriented so that the 3-per-revolution oscillations are in the lateral direction only then an examination of the resonance in rotating coordinates would show it to split up into 2-per-revolution advancing and 4-per-revolution regressive components of equal magnitude. If, on the other hand, the phenomena is associated with a resonance of a blade in rotating coordinates, for example, a flapping resonance at 2-per-revolution then there will be essentially no 4-per-revolution and in stationary axes the oscillation would appear as a circular advancing 3-per-revolution rotor tip path plane precession.

In studying the oscillatory experimental data in Table I it is, therefore, prudent to transform it to rotating coordinates, at each combination of cyclic pitch, and to examine the 2- and 4-per revolution content. In certain test conditions the 4P parts are less than 1/10 the 2P parts. The two analyses then should allow the source of the oscillatory behavior to be isolated. Table I lists the hub moment and shaft shear components transformed to rotating coordinates, the 2P and 4P components of each one displayed. They

are the cosine components on the values of the vectors at $\psi = 0$ and are denoted by M_{2c}, L_{2c}, M_{4c}, L_{4c}, Y_{2c}, X_{2c}, Y_{4c}, X_{4c}.

The specific purpose in showing the resolution of the hub moment and shaft shear forces into 2P and 4P components at each combination of cyclic pitch is to show that both components depend on the cyclic pitch in an essentially linear way. With this established then it is possible to work directly with the best fit plane derivatives and residuals of the 3P sine and cosine components of the forces in stationary axes. The smoothed stationary axis data are then resolved into rotating coordinate components. They are then nondimensionalized, given per radian of cyclic pitch, and presented as the final data in the summary, Appendix, Table II.

Blade bending moments. – At a tunnel wind speed of 80 knots, blade flapping bending moments at stations 43 and 118 and in-plane bending moments at stations 21 and 69 were read from oscillograph traces at closely spaced intervals of azimuth for each combination of cyclic pitch tested at the five tested values of advance ratio μ = .4, .5, .8, 1.1, and 2.0.

Appendix Table III contains the flap bending moment azimuthal distributions of blades 1, 2, and 3 at station 43, blade 2 at station 118, and in-plane bending moments on blade 2 at stations 21 and 69 in dimensional form harmonically analyzed to 10 cycles per revolution. Bending moments are in inch-pounds.

The flapping bending moment data were analyzed to provide the rates of change of bending moment azimuthal distribution with the cyclic pitch components $\left(\theta_{1c}, \theta_{1s}\right)$; $\alpha = 0$ and $\theta_{.75R} = 1.5$ degrees.

The flap bending moments were made into nondimensional coefficient form paralleling the form of the hub moment coefficients,

$$C_{b.m.} = \frac{b.m.}{\rho(\Omega R)^2 \pi R^2 R}$$

and the results were made even more general by presenting them in the form $\frac{b}{\sigma} C_{b.m.}$. This, in effect, converted the nondimensionalizing area from that of the disk πR^2 to that of the blade CR.

In this form the azimuthal distributions of flap bending moment derivatives became general enough to be applicable to any rotor at the same advance ratio μ, flap frequency P, and Lock number γ.

The residual distributions would require, in addition, that the rotor possess the same twist, precone, collective pitch, and angle-of-attack.

Each blade flapping bending moment distribution was analyzed for its derivatives and residuals by forming a best fit plane of each component of its harmonically analyzed data, to the fourth harmonic, versus θ_{1c} and θ_{1s}. Deviations, denoted by DEL, of each component at each combination of cyclic pitch from the best fit plane are shown in Appendix Table IV, Part a. The analyses were cut off at the fourth harmonic after an inspection of the higher harmonic data disclosed very little significant information.

The residuals and derivatives with θ_{1c} and θ_{1s} of each of the harmonic components is shown in Appendix Table IV, Part b, and from these harmonic components, the distribution of blade flapping bending moment around the azimuth, ψ (PSI), were calculated and presented in Appendix Table IV, Part c.

7.5-Foot, 4-Blade Rotor

The hub moments of the 7.5-foot, 4-blade rotor were determined by measuring the blade flapping bending moments at radial station 3.3 inches on configuration 1 and station 3.9 inches on configuration 3 on all four blades. The flapping bending moments were ganged together to provide total rotor moment and then transformed, by a resolving network, into stationary coordinates. The moments were factored appropriately, at each rpm, to convert the measured moments into hub moments applied to the shaft. The collective pitch, cyclic pitch, and angle-of-attack of the rotor were recorded during each test.

The hub pitch and roll moment variations with azimuth, at each combination of cyclic pitch, collective pitch, and rotor angle-of-attack at the test conditions of advance ratio μ, and flap frequency ratio P, at the Lock number $\gamma = 5.0$ were harmonically analyzed and the mean and 4P components retained. They are found nondimensionalized in Appendix Table V.

The hub moments are nondimensionalized in the conventional way, namely:

$$C_m = \frac{M}{\rho(\Omega R)^2 \pi R^2 R}$$

and the data presented in Table V is further divided by solidity to make it more general. The interpretation of the computer output labels is as follows.

		Units
THO	θ_o	radians
THS	θ_s	radians
THC	θ_c	radians
AL	α	radians
CM	$\frac{C_{mo}}{\sigma}$	
CL	$\frac{C_{\ell o}}{\sigma}$	
CM4PC	$\frac{C_{m4c}}{\sigma}$	
CM4PS	$\frac{C_{m4s}}{\sigma}$	
CL4PC	$\frac{C_{\ell 4c}}{\sigma}$	
CL4PS	$\frac{C_{\ell 4s}}{\sigma}$	

The hub moment coefficients in stationary axes coordinates, as a function of azimuth, are, therefore,

$$C_m = C_{mo} + C_{m4c} \cos 4\psi + C_{m4s} \sin 4\psi$$

$$C_\ell = C_{\ell o} + C_{\ell 4c} \cos 4\psi + C_{\ell 4s} \sin 4\psi$$

All higher harmonics have been neglected.

At each test condition, if μ and ρ at $\gamma = 5.0$, changes were made in one control or rotor position angle at a time. It was, therefore, possible to employ a one-dimensional least squares fit of the moment component variation, instead of the more complicated two-dimensional best fit plane required for the 33-foot rotor. This resulted in mean and oscillatory aeroelastic derivatives of hub moments with respect to cyclic pitch, collective pitch, and angle-of-attack. No residuals are presented since they should be zero according to the theory. In actual fact the small values that occurred may have been due to body flow field effects.

The derivatives of the 4-per-revolution coefficients in stationary axes were transformed to 3P and 5P coefficients in rotating coordinates and are presented in Table VI at each μ, ρ test condition for the $\gamma = 5.0$ rotor. It should be noted that the derivatives are for the zero azimuth position $\psi = 0$ or are the values of the cosine coefficients. The flag (FLG) numbers 1, 2, 3, and 4 denote derivatives with respect to θ_o, θ_{1s}, θ_{1c}, and α, respectively.

35-Foot, 4-Blade Rotor

A detailed inspection of the analyzed flight test data presented in Reference 2 indicated that meticulous attention had been paid to its preparation. Furthermore, the data appeared to be in a usable form as it stood. Additional analyses, for example, to obtain rotor aeroelastic derivatives could not be performed due to the free flight nature of the tests producing the data.

Employment of the data for the purpose of checking the applicability of rotor theory, however, was hampered by a lack of detailed information about the flight vehicle and the tests themselves. This report, therefore, has attempted to supply the missing details about the vehicle and information about eleven of the flight tests.

No repeitition of the experimental data of Reference 2 is contained in this report.

Table I. 33-Foot 3-Blade Rotor Reduced Experimental Dimensional Hub and Swashplate Loads Data

TEST 1 LOCKED GYRO MODE

VKT = 48.38 RPM = 98.7 MU = 0.40 P = 2.06

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (MEAN COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
-624.33	15681.60	-24.53	-427.61
1726.66	-4919.72	-8.18	88.16
3315.79	2325.46	-59.48	-72.81

N	T1C	T1S	Lsb	Msb	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	1.759	-.652	1810.	6686.	6487.	5428.	-672.	-722.	4988.	-1199.	30.	38.	-207.	18.
2	.382	.051	4284.	13418.	14402.	13082.	-177.	-381.	13557.	-561.	-15.	17.	-405.	-7.
3	1.507	-.734	2900.	6264.	8566.	6537.	490.	965.	6140.	-422.	11.	4.	-219.	23.
4	2.317	-1.190	0.	1155.	5369.	2339.	-1475.	-905.	693.	-481.	47.	20.	-134.	2.
5	2.918	-1.716	-450.	-1940.	775.	-417.	-989.	285.	-2610.	55.	61.	7.	-49.	-3.
6	1.665	-.888	1182.	4781.	6998.	5858.	-1381.	-915.	4574.	-1198.	35.	25.	-235.	-11.
7	1.177	-1.801	-2930.	6761.	9434.	8225.	-5277.	-714.	6112.	412.	58.	-14.	-216.	-25.
8	.597	-2.336	-4132.	9501.	997.	11603.	-6589.	949.	8570.	1258.	84.	-26.	-205.	0.
9	1.708	-.693	2884.	5670.	7907.	5349.	815.	786.	5096.	229.	-21.	-24.	-197.	30.
10	2.219	.061	6480.	5275.	13107.	5997.	3556.	212.	5835.	973.	-51.	-6.	-205.	-30.
11	2.616	.701	9448.	4230.	15825.	1201.	6717.	490.	5574.	1135.	-121.	-54.	-247.	1.
SIGMA								719.		852.		21.		17.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (1P COS COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
2137.75	-22671.36	-112.06	542.35
1509.04	10857.97	-20.43	-266.67
7005.25	-3421.36	-212.16	38.18

N	T1C	T1S	Lsb	Msb	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	1.759	-.652	828.	-1613.	-468.	-2611.	1158.	1036.	-672.	366.	-40.	-98.	52.	6.
2	.382	.051	-2761.	-20328.	-15755.	-23407.	2966.	-134.	-18947.	-252.	-123.	7.	529.	77.
3	1.507	-.734	-1427.	-2589.	-4096.	-2911.	-74.	525.	-2645.	1355.	-13.	-26.	125.	11.
4	2.317	-1.190	-5128.	5100.	250.	12111.	-4609.	-2094.	7767.	1206.	128.	37.	-135.	-12.
5	2.918	-1.716	-1847.	16173.	3634.	20855.	-4261.	914.	14058.	-782.	187.	-9.	-216.	84.
6	1.665	-.888	-1182.	-2478.	-3480.	-1836.	-103.	491.	-2849.	-1018.	34.	8.	82.	28.
7	1.177	-1.801	-10771.	-182.	-13624.	5303.	-5505.	-857.	-2809.	1128.	218.	-37.	114.	-44.
8	.597	-2.336	-16852.	-4376.	-22075.	5876.	-13388.	-112.	-8803.	-603.	402.	31.	241.	-51.
9	1.708	-.693	-5886.	-1883.	-10316.	-1681.	-387.	-517.	-1973.	-216.	8.	8.	10.	-42.
10	2.219	.061	8353.	-3520.	8260.	-8435.	3351.	2378.	-1462.	-2740.	-153.	-37.	2.	30.
11	2.616	.701	11734.	1779.	17496.	-5250.	6188.	-2018.	4880.	1561.	-282.	32.	-230.	-103.
SIGMA								1288.		1234.		23.		55.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (1P SIN COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
22812.50	65.17	-677.95	-245.37
10023.61	2349.16	315.88	5.05
5315.50	8771.98	-102.55	-178.82

N	T1C	T1S	Lsb	Msb	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	1.759	-.652	1427.	426.	3025.	-955.	722.	-882.	1034.	1262.	-55.	2.	-66.	-44.
2	.382	.051	20148.	-5106.	23327.	-18088.	18646.	-198.	618.	-4881.	-519.	63.	-133.	17.
3	1.507	-.734	3466.	-1981.	3952.	-5106.	3250.	-921.	-602.	788.	-125.	3.	-19.	-12.
4	2.317	-1.190	17806.	-3083.	-10857.	1562.	-4457.	-344.	-5825.	-2541.	189.	11.	122.	44.
5	2.918	-1.716	-16407.	1051.	-20634.	12424.	-14534.	-178.	-3990.	721.	436.	38.	183.	-8.
6	1.665	-.888	3264.	-1751.	2783.	-4039.	3471.	1256.	-716.	784.	-82.	-22.	19.	12.
7	1.177	-1.801	1570.	-11731.	-3006.	-15041.	1584.	-612.	-10265.	-435.	-132.	-38.	183.	2.
8	.597	-2.336	6477.	-17138.	-240.	-24507.	8433.	719.	-13880.	472.	-285.	-44.	288.	-5.
9	1.708	-.693	1977.	-1067.	2213.	-1201.	1872.	-258.	-1007.	-388.	-5.	83.	-9.	4.
10	2.219	.061	3568.	6317.	7780.	5086.	1710.	2675.	8855.	1304.	-49.	-86.	-168.	-27.
11	2.616	.701	-1448.	10770.	4624.	12170.	-6125.	-1041.	10148.	-805.	96.	-38.	-263.	16.
SIGMA								1041.		1116.		37.		22.

HARMONIC COMPONENTS: HUB MOMENTS HUB SHEAR FORCES

N	T1C	T1S	M1C	L2C	M2C	L4C	Y1C	X2C	Y4C	X4C
1	1.759	-.652	-847.	1217.	-125.	182.	56.	-52.	-2.	12.
2	.382	.051	-10706.	1782.	-130.	1174.	520.	-120.	0.	0.
3	1.507	-.734	-3868.	-338.	402.	284.	124.	-10.	-1.	3.
4	2.317	-1.190	7112.	-4856.	855.	265.	-160.	121.	25.	-1.
5	2.918	-1.716	16316.	-4128.	-218.	-138.	-337.	178.	118.	0.
6	1.665	-.888	-5180.	-4649.	311.	268.	82.	26.	0.	7.
7	1.177	-1.801	-3852.	-8085.	492.	388.	123.	201.	-2.	18.
8	.597	-2.336	-9118.	-13636.	315.	246.	288.	335.	-27.	62.
9	1.708	-.693	-1821.	-6597.	-50.	310.	12.	-1.	6.	0.
10	2.219	.061	-1588.	7603.	124.	748.	28.	-101.	-26.	-13.
11	2.616	.701	4510.	8047.	388.	-478.	-143.	-202.	-69.	-18.

Table I. (Continued)

TEST 2 LOCKED GYRO MODE

VKT = 48.04 RPM = 60.8 MU = 0.77 P = 3.85

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (MEAN COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
293.47	10770.21	-58.95	-298.41
764.23	-2694.58	4.89	41.25
2348.58	1363.95	-41.15	)-27.94

#	T1C	T1S	Lab	Mab	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	2.276	-1.091	1830.	4845.	5926.	3515.	-284.	288.	4277.	673.	-11.	-17.	-172.	2.
2	1.269	-.681	2289.	6272.	8582.	5501.	-417.	-723.	6888.	-699.	-11.	6.	-244.	-8.
3	-.115	.344	4331.	10302.	11841.	8653.	1019.	6.	11022.	-906.	-68.	8.	-300.	12.
4	2.200	-1.208	798.	3722.	5116.	3490.	-1105.	-242.	5022.	188.	-0.	-0.	-173.	1.
5	3.388	-1.841	-81.	807.	2380.	1351.	-1185.	276.	279.	672.	39.	-1.	-98.	9.
6	4.219	-2.775	-3025.	-3657.	-1481.	-1335.	-1483.	-489.	-4598.	-1958.	85.	17.	-42.	5.
7	2.269	-1.364	467.	3579.	4768.	3523.	-1420.	-228.	3588.	299.	-2.	-8.	-171.	-4.
8	1.693	-2.007	-797.	6857.	5705.	4989.	-1783.	365.	5815.	-195.	38.	8.	-188.	-8.
9	.788	-3.437	-5201.	9588.	-781.	7702.	-7145.	93.	6849.	333.	85.	-1.	-177.	-4.
10	2.670	-.584	3809.	3263.	8131.	2688.	1982.	752.	3574.	151.	-14.	-5.	-173.	1.
11	3.450	.788	6769.	2575.	11388.	784.	4701.	-61.	3371.	149.	-72.	6.	-188.	-8.
SIGMA								396.		685.		8.		7.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (3P COS COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
8826.27	-1752.11	-131.15	42.38
-3070.72	1588.88	35.85	-33.84
1551.94	1872.52	-56.48	-42.24

#	T1C	T1S	Lab	Mab	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	2.276	-1.091	1249.	-765.	695.	-1946.	1495.	1348.	-669.	-334.	-10.	-3.	22.	10.
2	1.269	-.681	3022.	-1658.	2769.	-2298.	3140.	-1229.	-1076.	-491.	-30.	57.	11.	-6.
3	-.115	.344	8937.	-3110.	7852.	-6906.	9409.	-306.	-1435.	-181.	-152.	-3.	43.	12.
4	2.200	-1.208	42.	-1098.	-828.	-685.	634.	215.	-1365.	-670.	24.	30.	55.	16.
5	3.388	-1.841	-3484.	1669.	-5760.	2398.	-3340.	1094.	1347.	1418.	29.	-52.	11.	5.
6	4.219	-2.775	-10185.	-55.	-10848.	5871.	-9888.	-1652.	-1785.	-1174.	157.	59.	27.	9.
7	2.269	-1.364	-892.	-810.	-806.	-673.	-929.	-753.	-670.	246.	5.	6.	-3.	-28.
8	1.693	-2.007	188.	-2760.	-1535.	-2912.	832.	518.	-2662.	544.	-7.	-14.	66.	-4.
9	.788	-3.437	19.	-6872.	-4175.	-6850.	1868.	548.	-6877.	546.	1.	-26.	188.	6.
10	2.670	-.584	-97.	775.	1309.	726.	-718.	-584.	794.	-646.	-2.	16.	-56.	-30.
11	3.450	.788	1227.	5274.	3581.	3398.	189.	764.	6098.	989.	-74.	-48.	-96.	15.
SIGMA								884		737.		29.		15.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (3P SIN COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
6050.30	7847.47	-95.43	-147.18
-1893.66	-2234.83	37.32	30.38
-2010.42	1766.24	24.65	-24.90

#	T1C	T1S	Lab	Mab	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	2.276	-1.091	2420.	1836.	2128.	-592.	2547.	613.	2817.	2188.	-89.	-52.	12.	17.
2	1.269	-.681	4865.	2388.	5254.	1620.	4690.	2199.	2725.	-1417.	-31.	28.	-16.	59.
3	-.115	.344	9358.	6987.	8025.	6971.	2740.	-836.	7871.	-456.	-81.	11.	-147.	15.
4	2.200	-1.208	2312.	1351.	3015.	-1228.	2001.	-313.	2659.	1886.	-142.	-60.	-28.	-22.
5	3.388	-1.841	621.	-3149.	-482.	-3806.	1071.	-286.	-2858.	324.	-26.	-12.	41.	-28.
6	4.219	-2.775	-220.	-7988.	-5489.	-7292.	1826.	285.	-8163.	-1475.	26.	30.	195.	68.
7	2.269	-1.364	2789.	-1252.	3095.	-1729.	2652.	119.	-1081.	-1247.	-19.	26.	-12.	-12.
8	1.693	-2.007	6417.	-4406.	5768.	-3825.	1868.	-1088.	655.	118.	-75.	6.	-52.	-48.
9	.788	-3.437	9997.	-12968.	10388.	-9129.	9882.	-19.	662.	652.	-194.	-1.	-35.	-9.
10	2.670	-.584	-161.	217.	355.	727.	-359.	-387.	-8.	-793.	20.	29.	-20.	-20.
11	3.450	.788	-6366.	2488.	-8658.	3677.	-4468.	-618.	1931.	821.	68.	-6.	-12.	-19.
SIGMA								825.		1197.		39.		33.

HARMONIC COMPONENTS: HUB MOMENTS HUB SHEAR FORCES

#	T1C	T1S	M4C	L1C	M1C	L0C	Y4C	X4C	Y0C	M0C
1	2.276	-1.091	-1608.	2158.	939.	-882.	56.	1.	-33.	-11.
2	1.269	-.681	-2883.	2933.	1807.	288.	21.	-25.	-10.	-6.
3	-.115	.344	-2088.	8648.	852.	788.	82.	-149.	-19.	-3.
4	2.200	-1.208	-1685.	1447.	318.	-1815.	68.	-1.	-34.	26.
5	3.388	-1.841	138.	-3899.	1288.	-281.	19.	35.	-8.	-8.
6	4.219	-2.775	-1858.	-9025.	78.	-882.	1.	178.	29.	-19.
7	2.269	-1.364	-1661.	-985.	991.	58.	8.	-5.	-11.	9.
8	1.693	-2.007	-3271.	631.	889.	281.	71.	-29.	-6.	23.
9	.788	-3.437	-8239.	1156.	1362.	712.	181.	-17.	7.	18.
10	2.670	-.584	577.	-342.	217.	-334.	-38.	-11.	-18.	9.
11	3.450	.788	9205.	1869.	615.	-891.	-71.	-45.	-15.	-32.

Table I. (Continued)

TEST 3 LOCKED GYRO MODE

VKT = 50.03 RPM = 46.3 MU = 1.06 P = 3.90

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (MEAN COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
1665.09	10677.09	-95.95	-285.85
77.05	-1866.97	0.49	37.57
1527.98	1350.82	-41.29	-21.49

B	T1C	T1S	Lab	Mab	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	3.297	-2.088	-703.	1744.	2593.	2360.	-2159.	-28.	1671.	-290.	25.	0.	-132.	10.
2	2.675	-1.572	1488.	4696.	6851.	3844.	-526.	871.	5068.	1089.	-34.	-29.	-183.	1.
3	1.162	-.582	5806.	6910.	8820.	5676.	642.	-170.	7649.	-298.	-49.	13.	-235.	9.
4	3.388	-1.911	479.	1995.	4088.	2327.	-1132.	872.	1867.	-154.	19.	2.	-144.	0.
5	3.459	-3.689	-3807.	292.	-602.	2349.	-4920.	272.	-813.	87.	82.	-8.	-120.	-0.
6	4.716	-2.126	-1654.	-585.	846.	734.	-2467.	-577.	-878.	32.	45.	13.	-92.	10.
7	5.041	-3.289	-3335.	-2130.	-1588.	-85.	-4111.	195.	-3030.	51.	82.	-1.	-72.	6.
8	3.291	-2.032	-795.	1515.	2961.	2216.	-2273.	-255.	1209.	-645.	28.	12.	-136.	17.
9	2.734	-2.020	-1735.	2210.	3548.	3322.	-3535.	40.	1638.	-185.	32.	0.	-163.	-15.
10	1.851	-4.198	-5169.	1745.	-1267.	4898.	-6894.	-589.	1865.	281.	84.	-9.	-157.	-12.
11	3.216	-1.984	-251.	1920.	3635.	2109.	-1869.	-32.	1859.	-217.	8.	-8.	-155.	-1.
12	5.882	-1.215	1484.	1619.	5987.	1313.	-501.	-104.	1753.	-116.	-18.	1.	-108.	-87.
13	4.739	.073	3758.	1567.	8084.	-298.	1849.	-502.	2548.	330.	-71.	-12.	-173.	-16.
SIGMA								982.		600.		11.		14.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (3P COS COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
8371.94	-3885.89	-125.88	79.65
-1630.57	896.89	17.62	-23.84
188.88	911.89	-16.97	-10.99

B	T1C	T1S	Lab	Mab	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	3.297	-2.088	2190.	-5805.	236.	-5033.	3050.	-1215.	-5745.	-2989.	-5.	32.	78.	30.
2	2.675	-1.572	6198.	-4946.	2784.	-6478.	6254.	-685.	-4288.	-1246.	-61.	-2.	69.	8.
3	1.162	-.582	8828.	-3674.	5139.	-5869.	7581.	-50.	-1789.	691.	-98.	9.	58.	4.
4	3.388	-1.911	5568.	-4818.	3827.	-2703.	5515.	1232.	17.	2883.	-76.	-36.	14.	-29.
5	3.459	-3.689	2568.	-4549.	1126.	-4461.	2982.	-831.	-4385.	-294.	-16.	-6.	49.	-22.
6	4.716	-2.126	5131.	-1655.	2608.	-1852.	5448.	1220.	-1567.	151.	-8.	6.	29.	10.
7	5.041	-3.289	624.	-1758.	-209.	-1267.	991.	-559.	-1983.	304.	20.	9.	55.	8.
8	3.291	-2.032	5773.	358.	4320.	-1416.	5530.	-755.	1139.	3849.	-71.	-33.	-22.	-65.
9	2.734	-2.020	5576.	-3385.	3615.	-4768.	6348.	2615.	-2771.	2197.	-55.	-19.	70.	8.
10	1.851	-4.198	4987.	-4889.	1854.	-7104.	6537.	598.	-4761.	-786.	-9.	11.	130.	11.
11	3.216	-1.984	5725.	-4917.	3758.	-5859.	6587.	187.	-4598.	-1082.	-29.	11.	79.	58.
12	5.882	-1.215	5912.	-3184.	5815.	-4566.	7881.	-751.	-2648.	-1204.	-48.	-8.	-4.	-18.
13	4.739	.073	5519.	-83.	6115.	-803.	7988.	360.	254.	-273.	-29.	18.	-52.	5.
SIGMA								849.		1765.		19.		28.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (3P SIN COMPONENT)

ROW1:d(0) ROW2:q(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
-2061.68	4573.26	-6.70	-185.78
-347.65	-2883.85	22.77	59.52
-2699.81	2359.65	26.11	-39.79

B	T1C	T1S	Lab	Mab	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	3.297	-2.088	-2789.	-7341.	-5839.	-6447.	-1503.	-3514.	-7758.	2158.	36.	22.	119.	-50.
2	2.675	-1.572	-1780.	-5529.	-3443.	-5224.	-1046.	-2055.	-5661.	2488.	12.	6.	67.	-31.
3	1.162	-.582	-252.	-609.	193.	-586.	-419.	591.	-619.	-687.	1.	-6.	-17.	-1.
4	3.388	-1.911	1116.	-9602.	-1926.	-10173.	2895.	1530.	-9344.	129.	-25.	-42.	102.	2.
5	3.459	-3.689	2076.	-13578.	-3838.	-13822.	4325.	-1831.	-13698.	845.	-14.	19.	204.	-37.
6	4.716	-2.126	187.	-12594.	-4408.	-13648.	2577.	985.	-13428.	674.	-7.	-22.	224.	-27.
7	5.041	-3.289	983.	-17509.	-7269.	-18409.	4581.	175.	-17978.	-259.	40.	22.	328.	17.
8	3.291	-2.032	2715.	-11492.	-2204.	-10850.	4878.	3005.	-11844.	-2157.	34.	10.	197.	56.
9	2.734	-2.020	3780.	-11619.	-959.	-11891.	5050.	1814.	-11492.	-1550.	-11.	7.	189.	51.
10	1.851	-4.198	6872.	-11832.	2915.	-14196.	8523.	537.	-10698.	186.	-102.	-28.	150.	-6.
11	3.216	-1.984	-816.	-10882.	-5805.	-9844.	1585.	-598.	-11304.	-1024.	41.	26.	200.	43.
12	5.882	-1.215	-3787.	-8192.	-8560.	-6352.	-1681.	-1307.	-9208.	290.	82.	32.	191.	22.
13	4.739	.073	-8227.	-8181.	-9350.	-6808.	-5407.	683.	-9157.	-216.	87.	-18.	169.	-6.
SIGMA								1887.		1340.		20.		28.

HARMONIC COMPONENTS: HUB MOMENTS HUB SHEAR FORCES

B	T1C	T1S	H1C	L2C	M+C	L-C	Y4C	X4C	Y+C	X3C
1	3.297	-2.088	-2121.	-2340.	-3619.	5390.	21.	55.	57.	-60.
2	2.675	-1.572	-1811.	196.	-2837.	4257.	24.	3.	36.	-64.
3	1.162	-.582	-1145.	1471.	-1582.	4098.	33.	-52.	34.	-59.
4	3.388	-1.911	-1639.	-1915.	1456.	7630.	18.	45.	-9.	-119.
5	3.459	-3.689	-4345.	-5252.	-10.	8154.	52.	94.	18.	-110.
6	4.716	-2.126	-1972.	-4884.	605.	8432.	18.	108.	11.	-116.
7	5.041	-3.289	-3282.	-8494.	1299.	9688.	-5.	176.	39.	-154.
8	3.291	-2.032	-1869.	-4187.	3009.	7697.	-28.	63.	0.	-139.
9	2.734	-2.020	-2319.	-3571.	1940.	8920.	42.	67.	38.	-122.
10	1.851	-4.198	-7543.	-2079.	731.	8416.	116.	78.	34.	-88.
11	3.216	-1.984	-2989.	-3358.	-1686.	7945.	19.	89.	68.	-134.
12	5.882	-1.215	-479.	-3211.	-2160.	6073.	-43.	72.	59.	-139.
13	4.739	.073	1821.	-3885.	-1586.	6051.	-66.	66.	28.	-97.

Table I. (Continued)

TEST 4 LOCKED GYRO MODE

VET = 80.91 RPM = 167.8 MU = 0.40 P = 1.56

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (MEAN COMPONENT)

ROW1:d(θ) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
4138.25	27013.63	-12.52	-316.63
3931.63	-10172.63	-11.17	95.17
10851.13	6879.21	-139.50	-50.02

n	T1C	T1S	Lsh	Msh	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	2.062	-.[illegible]	2173.	893.	4703.	3540.	1037.	-1283.	-355.	-355.	108.	15.	-101.	-8.
2	1.511	-.717	4608.	11851.	8429.	12154.	2375.	278.	10513.	1230.	46.	-17.	-202.	-28.
3	.822	-.462	4343.	14564.	5691.	16874.	1585.	-761.	14154.	-1644.	88.	32.	-214.	13.
4	.217	-.297	8965.	23126.	13988.	25936.	2407.	480.	22882.	-118.	18.	4.	-266.	-8.
5	2.201	-1.582	-1271.	-3854.	-1158.	578.	-1769.	1369.	-4424.	638.	149.	-10.	-85.	174.
6	3.218	-2.308	-7228.	-17882.	-6436.	-11146.	-6688.	-511.	-20838.	-1058.	269.	22.	48.	-84.
7	1.866	-1.127	1107.	2827.	4001.	5513.	-54.	-215.	1227.	501.	106.	-9.	-115.	-54.
8	1.445	-1.022	-7381.	1015.	-4630.	5432.	-8518.	-848.	-858.	-115.	178.	-20.	-110.	-2.
9	.[illegible]	-2.[illegible]	-18706.	3876.	-15247.	12180.	-20158.	837.	225.	782.	331.	-10.	-197.	1.
10	1.595	-.967	34451.	8477.	8133.	8268.	1091.	1177.	9872.	940.	64.	-25.	-123.	18.
11	2.101	-.162	18458.	3536.	15366.	3535.	5121.	-1646.	1674.	-2054.	24.	41.	-102.	14.
12	2.863	.886	25698.	1367.	27581.	-2135.	24858.	-448.	3465.	-226.	-163.	5.	-76.	1.
13	3.234	1.582	34015.	1780.	35530.	-4975.	33328.	1418.	4680.	1411.	-287.	-29.	-61.	-4.
SIGMA								5ea.		1851.		29.		12.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (3P COS COMPONENT)

ROW1:d(θ) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
-7021.46	-5595.23	288.48	473.48
5049.83	1852.03	-178.31	-158.64
-418.38	-3752.38	48.05	197.74

n	T1C	T1S	Lsh	Msh	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	2.062	-.[illegible]	5885.	583.	8788.	-2236.	4480.	684.	1788.	-134.	-112.	11.	-121.	4.
2	1.511	-.717	-1396.	196.	-5628.	923.	-4484.	-295.	-124.	354.	29.	6.	88.	18.
3	.822	-.462	-4370.	-441.	-8650.	2150.	-2481.	284.	-1532.	747.	184.	-18.	171.	-48.
4	.217	-.297	-8725.	-1149.	-10367.	3802.	-5517.	-148.	-4782.	-708.	284.	58.	343.	-27.
5	2.201	-1.582	7137.	2733.	16101.	-1545.	4064.	-697.	5051.	657.	-115.	-45.	-128.	8.
6	3.218	-2.308	17786.	5251.	35075.	-2791.	10157.	-35.	8359.	-171.	-324.	60.	-681.	-69.
7	1.866	-1.127	4106.	1755.	8581.	435.	3837.	-36.	2332.	262.	-52.	41.	-118.	3.
8	1.445	-1.022	4855.	2338.	9238.	-35.	2921.	872.	3489.	-903.	-67.	-16.	-175.	48.
9	.[illegible]	-2.[illegible]	1488.	6581.	7884.	5313.	-972.	-189.	7138.	5.	-51.	-42.	-225.	75.
10	1.595	-.967	1551.	180.	2680.	-615.	1043.	-388.	501.	-418.	-31.	7.	-46.	-14.
11	2.101	-.162	6148.	-1683.	5130.	-5501.	3625.	-15.	0.	1173.	-153.	-57.	-67.	-75.
12	2.863	.886	5618.	-7302.	975.	-12240.	7372.	357.	-5171.	-1127.	-138.	-10.	178.	78.
13	3.234	1.582	6828.	-7548.	3282.	-13584.	8386.	-288.	-4568.	283.	-236.	8.	142.	16.
SIGMA								488.		847.		35.		46.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (3P SIN COMPONENT)

ROW1:d(θ) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
5316.42	-5586.21	-163.63	154.42
-1028.96	4188.63	13.08	-187.86
5796.76	658.58	-147.29	-126.26

n	T1C	T1S	Lsh	Msh	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	2.062	-.[illegible]	-1550.	2583.	361.	4165.	-2644.	-1082.	1871.	-631.	86.	58.	-78.	-8.
2	1.511	-.717	1234.	-2383.	-96.	-2285.	1419.	630.	-2713.	-2241.	12.	33.	93.	38.
3	.822	-.462	2231.	-3965.	-1056.	-4256.	2956.	277.	-1780.	588.	-116.	-32.	66.	-8.
4	.217	-.297	2148.	-6263.	-2481.	-6515.	4186.	231.	-5057.	-302.	-186.	11.	185.	30.
5	2.201	-1.582	-2562.	4468.	-1737.	6436.	-2295.	176.	3512.	888.	81.	-18.	-32.	-16.
6	3.218	-2.308	-5775.	8035.	-4606.	13362.	-6284.	618.	5418.	-1076.	237.	17.	-67.	52.
7	1.866	-1.127	-1846.	2988.	-1301.	4865.	-1821.	-847.	2336.	806.	48.	20.	2.	21.
8	1.445	-1.022	-1388.	1751.	-5020.	4565.	-5193.	136.	810.	302.	113.	-14.	73.	-53.
9	.[illegible]	-2.[illegible]	-9688.	255.	-16731.	9552.	-6282.	674.	-2078.	1149.	211.	-65.	290.	-58.
10	1.595	-.967	288.	112.	-10.	-245.	370.	373.	288.	-518.	-14.	-11.	11.	7.
11	2.101	-.162	1904.	2735.	6181.	1862.	-2765.	-1782.	3266.	95.	-67.	68.	-148.	32.
12	2.863	.886	12488.	3675.	21791.	-4181.	7497.	1583.	7285.	61.	-338.	-87.	-482.	-6.
13	3.234	1.582	14388.	5895.	25863.	-5183.	7522.	-35.	8881.	820.	-383.	-28.	-625.	-44.
SIGMA								910.		849.		41.		32.

HARMONIC COMPONENTS: HUB MOMENTS HUB SHEAR FORCES

N	T1C	T1S	Mac	Lac	Mmc	Lmc	Yac	Xac	Ymc	Xmc
1	2.062	-.[illegible]	2126.	3135.	-325.	1284.	-[illegible].	-[illegible].	-31.	-17.
2	1.511	-.717	-672.	-1556.	847.	1154.	30.	61.	51.	-11.
3	.822	-.462	-2270.	-2121.	602.	-360.	144.	85.	22.	15.
4	.217	-.297	-4487.	-5586.	-300.	-873.	225.	290.	216.	80.
5	2.201	-1.582	3457.	1783.	1103.	276.	-1240.	-126.	-[illegible].	-[illegible].
6	3.218	-2.308	7571.	7788.	1288.	2978.	-484.	-185.	-227.	-138.
7	1.866	-1.127	2077.	2618.	256.	228.	-61.	-25.	-34.	-27.
8	1.445	-1.022	3501.	1716.	188.	1206.	-144.	-12.	-31.	-85.
9	.[illegible]	-2.[illegible]	6712.	-1526.	424.	552.	-217.	120.	-6.	-170.
10	1.595	-.967	61.	858.	440.	558.	-16.	-19.	-36.	-11.
11	2.101	-.162	-371.	3466.	375.	184.	0.	-151.	-67.	-2.
12	2.863	.886	-[illegible].	2788.	2248.	86.	258.	-329.	-88.	127.
13	3.234	1.582	-6261.	5134.	1281.	-768.	282.	-428.	-113.	198.

Table I. (Continued)

TEST 6 LOCKED GYRO MODE

VKT = 50.06 RPM = 73.3 MU = 0.80 P = 2.61

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (MEAN COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
4821.92	17807.35	-57.07	-229.69
716.54	-5704.77	3.54	47.78
3888.59	2340.02	-52.36	-10.29

B	T1C	T1S	Lab	Mab	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	2.425	-.842	4207.	6034.	6901.	8426.	3017.	-185.	5857.	-48.	16.	1.	-108.	-3.
2	1.808	-.613	5528.	8822.	8986.	8521.	4001.	329.	8949.	158.	-12.	-13.	-158.	-2.
3	1.222	-.057	8519.	12277.	10589.	10779.	6721.	-920.	11689.	-868.	-30.	12.	-283.	8.
4	.521	.838	10159.	16019.	13794.	14458.	7669.	-70.	18684.	138.	-42.	7.	-225.	-16.
5	1.875	-1.809	-211.	6362.	3250.	7688.	-1736.	-484.	5782.	38.	52.	-12.	-138.	-17.
6	2.488	-2.340	-1987.	2939.	589.	5385.	-3077.	-548.	1859.	-964.	98.	4.	-98.	-15.
7	3.272	-2.914	-4268.	-778.	-3138.	2613.	-4768.	-513.	-2277.	-195.	136.	9.	-48.	-2.
8	1.879	-1.498	1170.	6641.	4371.	8619.	-241.	-68.	5765.	-476.	79.	27.	-128.	-5.
9	1.269	-2.545	-2814.	7341.	690.	9712.	-4386.	62.	6292.	-4.	95.	-6.	-140.	2.
10	.517	-3.539	-6905.	8627.	-2962.	12544.	-8635.	290.	6895.	109.	157.	7.	-158.	11.
11	1.768	-1.602	1483.	7410.	5099.	8625.	609.	908.	7591.	961.	29.	-26.	-125.	4.
12	2.253	-.721	4777.	6937.	7045.	8883.	3775.	227.	6954.	10.	-2.	-10.	-91.	25.
13	2.973	.062	9041.	6409.	10999.	5286.	8172.	1051.	6999.	969.	-45.	-16.	-78.	9.
14	3.402	.665	10584.	4911.	12508.	3783.	9558.	-576.	5405.	-602.	-45.	15.	-77.	-5.

SIGMA 536. 673. 19. 11.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (3P COS COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
18291.88	-5821.13	-326.83	137.82
-5288.71	3621.62	95.97	-72.15
4259.58	4316.38	-83.38	-56.51

B	T1C	T1S	Lab	Mab	L1c)	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	2.425	-.842	1688.	-759.	1681.	-1889.	1690.	-551.	-338.	343.	-17.	-13.	8.	-10.
2	1.808	-.613	5692.	-2352.	4672.	-5341.	6138.	-85.	-1033.	885.	-129.	-17.	61.	-1.
3	1.222	-.057	10531.	-5177.	8574.	-8530.	11587.	-542.	-906.	651.	-298.	8.	78.	27.
4	.521	.838	19019.	-5495.	17515.	-13760.	19670.	1414.	-1855.	-674.	-531.	-1.	84.	-4.
5	1.875	-1.809	987.	-1565.	-1262.	-6017.	1989.	1185.	-4981.	1882.	-51.	-53.	84.	-15.
6	2.488	-2.340	-4298.	-6949.	-7645.	-3776.	-2909.	1781.	-8344.	-1451.	127.	29.	128.	56.
7	3.272	-2.914	-11483.	-3688.	-12988.	1838.	-10795.	483.	-8118.	639.	221.	-9.	89.	-8.
8	1.879	-1.498	1968.	-5109.	-94.	-6255.	2868.	1153.	-6802.	1289.	-46.	-32.	82.	-10.
9	1.269	-2.545	-3702.	-12924.	-8648.	-11346.	-1650.	-2458.	-13487.	-1256.	59.	92.	196.	5.
10	.517	-3.539	-5114.	-19285.	-10855.	-18492.	298.	-185.	-19466.	-219.	16.	-2.	310.	10.
11	1.768	-1.602	1252.	-6888.	-805.	-7172.	2157.	-66.	-6758.	-427.	-11.	12.	82.	-18.
12	2.253	-.721	1818.	-1723.	2088.	-2215.	1698.	-1854.	-1505.	-681.	-20.	33.	-11.	-28.
13	2.973	.062	3838.	4482.	6015.	2986.	2876.	-77.	5134.	6.	-59.	-14.	-87.	-8.
14	3.402	.665	4211.	8250.	7247.	7510.	2871.	-560.	8571.	-748.	-58.	26.	-121.	26.

SIGMA 1134. 926. 26. 18.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (3P SIN COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
8178.19	17338.14	-148.87	-288.44
-3949.28	-5366.12	87.22	83.16
-3573.73	4528.92	61.07	-75.85

B	T1C	T1S	Lab	Mab	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	2.425	-.842	2200.	-426.	1410.	-712.	2326.	718.	-190.	-819.	-11.	19.	12.	8.
2	1.808	-.613	3807.	4299.	5243.	2445.	5172.	-54.	5929.	145.	-68.	-19.	-57.	7.
3	1.222	-.057	6881.)	9548.	8210.	6869.	9382.	-180.	10621.	9.	-102.	-61.	-154.	22.
4	.521	.838	7423.	17758.	14154.	18142.	8455.	817.	18454.	1927.	-65.	9.	-289.	-8.
5	1.875	-1.809	6084.	-521.	6078.)	-3361.	5988.	-1372.	731.	1442.	-114.	12.	-3.	-32.
6	2.488	-2.340	6388.	-7261.	2926.)	-10670.	7908.	1195.	-7814.	784.	-129.	-13.	138.	14.
7	3.272	-2.914	3301.	-13915.	-2548.	-17057.	5881.	212.	-12922.	842.	-126.	-27.	254.	8.
8	1.879	-1.498	6013.)	-675.	6098.	-2505.	5975.	-467.	132.	79.	-73.	38.	-3.	-16.
9	1.269	-2.545	12101.	-5708.	11099.	-10544.	12574.	315.	-5551.	-2562.	-195.	15.	46.	11.
10	.517	-3.539	17942.	-9526.	17126.	-15508.	18290.	-493.	-1717.	-258.	-527.	-5.	35.	-11.
11	1.768	-1.602	6746.	-75.	6925.	-2275.)	6663.	-254.	1158.	557.	-112.	8.	-7.	-12.
12	2.253	-.721	2525.)	1042.	2190.	-135.	2671.	740.	1418.	-476.	-49.	-14.	13.	35.
13	2.973	.062	-4058.	2535.	-3041.	4246.	-4506.	-788.	1401.	-49.	76.	15.	-61.	-26.
14	3.402	.665	-7607.	2805.	-6700.	5872.	-8002.	-567.	1161.	-939.	151.	2.	-36.	-10.

SIGMA 651. 997. 19. 18.

HARMONIC COMPONENTS: HUB MOMENTS HUB SHEAR FORCES

B	T1C	T1S	M2c	L2C	MoC	LoC	Y2C	X2C	YoC	XoC
1	2.425	-.842	-1328.	695.	998.	995.	6.	-13.	-4.	-26.
2	1.808	-.613	-2103.	5501.	1069.	556.	53.	-69.	-13.	-31.
3	1.2111	6(6J=103.	11008.	1259.	385.	90.	-170.	-12.	-38.	
4	.521	.838	-3152.	19065.	1303.	687.	62.	-180.	-2.	-31.
5	1.875	-1.809	-1474.	1350.	693.	619.	101.	-37.	-12.	-26.
6	2.488	-2.340	-8126.	-5341.	-218.	1652.	128.	135.	-2.	-6.
7	3.272	-2.914	-5990.	-11697.	-119.	865.	93.	228.	-33.	-7.
8	1.879	-1.498	-5287.	1490.	685.	1558.	77.	-25.	4.	-21.
9	1.269	-2.545	-13021.	-2601.	-446.	951.	195.	51.	-1.	8.
10	.517	-3.539	-18868.	-710.	-578.	1888.	518.	24.	-8.	-4.
11	1.768	-1.602	-6711.	1857.	-48.	490.	97.	-9.	-15.	-2.
12	2.253	-.721	-2988.	1858.	983.	46.	10.	-3.	-58.	-17.
13	2.973	.062	4819.	2184.	315.	692.	-82.	-58.	-5.	-6.
14	3.402	.665	8288.	2816.	285.	859.	-128.	-33.	9.	9.

Table I. (Continued)

TEST 6 LOCKED GYRO HUBS

VKT = 60.62 RPM = 52.7 MU = 1.11 P = 3.67

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (MEAN COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
5691.21	16731.19	-58.37	-389.79
29.67	-2868.88	11.44	29.75
3040.65	1910.60	-57.25	-6.60

N	T1C	T1S	Lsh	Msh	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	2.623	-1.994	126.	4555.	2458.	5892.	-905.	-512.	5875.	-526.	61.	10.	-95.	6.
2	1.963	-1.529	3067.	7895.	6274.	7857.	1682.	830.	7407.	1955.	-2.	-29.	-128.	-8.
3	1.128	-.869	6161.	9857.	8367.	9396.	2505.	-671.	10028.	-138.	-19.	-5.	-168.	-19.
4	.276	-.089	8119.	13588.	12521.	12311.	8168.	761.	14119.	569.	-59.	2.	-178.	5.
5	2.078	-2.187	-13.	4279.	2287.	5081.	-1018.	-79.	5488.	-149.	81.	7.	-91.	5.
6	3.633	-2.853	-2584.	1615.	-561.	3721.	-3291.	-267.	886.	195.	84.	-1.	-76.	-7.
7	4.262	-3.287	-3665.	-1008.	-2519.	1851.	-4165.	796.	-2247.	487.	114.	-6.	-46.	-5.
8	2.633	-1.981	3.	3795.	2147.	5488.	-902.	-588.	3847.	-1145.	87.	22.	-88.	13.
9	1.959	-1.076	-3089.	6816.	-262.	8757.	-4313.	-559.	3958.	-514.	79.	-1.	-113.	-1.
10	1.383	-4.051	-5277.	6444.	-1986.	8758.	-6759.	30.	5438.	792.	91.	-17.	-135.	-22.
11	.813	-3.098	-7647.	7826.	-4383.	11186.	-9521.	530.	6367.	518.	131.	-5.	-163.	2.
12	2.528	-1.993	32.	5819.	1934.	5481.	-888.	-414.	5237.	-1254.	82.	17.	-78.	26.
13	5.088	-1.270	2988.	4121.	5154.	5132.	1911.	58.	3679.	-561.	44.	17.	-96.	2.
14	3.763	-.585	4926.	3176.	6888.	3282.	4094.	180.	3132.	71.	6.	-2.	-75.	-1.
15	4.098	.138	6513.	2818.	8291.	2378.	5725.	-512.	3414.	-184.	-18.	-1.	-73.	-2.
16	4.877	1.012	10265.	2728.	11682.	1288.	9634.	870.	3359.	1481.	-58.	-16.	-57.	-6.
SIGMA								512.		675.		13.		10.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (3P COS COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
14001.16	-1756.17	-107.67	81.93
-6161.59	2531.51	44.04	-46.24
1546.11	1670.26	-24.41	-18.75

N	T1C	T1S	Lsh	Msh	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	2.623	-1.994	1665.	1554.	1648.	593.	1382.	624.	1675.	675.	-31.	-20.	-7.	-6.
2	1.963	-1.529	4607.	-771.	5154.	-2681.	4057.	2840.	127.	-85.	-70.	-23.	50.	31.
3	1.128	-.889	6288.	-1783.	7190.	-4363.	5605.	-104.	-648.	-38.	-103.	8.	58.	-8.
4	.276	-.089	10171.	-5287.	10512.	-8134.	13138.	-378.	1183.	182.	-153.	-20.	62.	-8.
5	2.078	-2.187	838.	1074.	968.	826.	659.	706.	1271.	447.	-18.	-15.	0.	2.
6	3.633	-2.853	-2584.	1616.	-2577.	2686.	-2672.	1492.	1260.	-208.	60.	-11.	5.	27.
7	4.262	-3.287	-4035.	3525.	-4214.	5573.	-4832.	-423.	2816.	277.	85.	-25.	-73.	-22.
8	2.633	-1.981	-460.	517.	-872.	905.	-787.	-170.	525.	-761.	18.	23.	-5.	1.
9	1.959	-1.076	566.	-2795.	-576.	-2567.	588.	-785.	-2774.	-637.	17.	26.	15.	7.
10	1.383	-4.051	1180.	-3249.	-1958.	-3702.	2170.	-443.	-3311.	8.	3.	9.	30.	-5.
11	.813	-3.098	3180.	-5271.	-711.	-5880.	4777.	-187.	-5085.	252.	-16.	2.	153.	-5.
12	2.528	-1.993	-198.	1615.	699.	1155.	-881.	-1611.	1525.	725.	-4.	11.	-24.	-25.
13	5.088	-1.270	1313.	2952.	2127.	2476.	955.	662.	3907.	-106.	-14.	1.	-35.	1.
14	3.763	-.585	-121.	4410.	1454.	4772.	-917.	847.	4749.	-1750.	14.	16.	-65.	17.
15	4.098	.138	-1217.	5615.	1514.	6832.	-2755.	-353.	5515.	440.	8.	16.	-101.	10.
16	4.877	1.012	-2686.	11845.	1524.	11745.	-4716.	-724.	11457.	823.	-4.	-5.	-184.	-21.
SIGMA								1087.		821.		17.		16.

HUB MOMENT DERIVATIVES DUE TO CYCLIC APTLES (3P SIN COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
1006.26	10218.82	-95.57	-165.89
-269.32	-1170.72	20.66	46.72
-9588.28	2969.75	68.98	-67.77

N	T1C	T1S	Lsh	Msh	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	2.623	-1.994	6805.	-5355.	6567.	-7982.	7715.	522.	-6911.	-1282.	-76.	1.	101.	25.
2	1.963	-1.529	4766.	-1854.	5771.	-2737.	5369.	-555.	-735.	-478.	-87.	3.	35.	18.
3	1.128	-.889	4022.	-1431.	5429.	-1751.	4177.	311.	3669.	-686.	-83.	-8.	-48.	5.
4	.276	-.089	1586.	-6968.	5527.	-8701.	-336.	-1586.	10527.	1587.	-48.	-2.	-167.	-36.
5	2.078	-2.187	7137.	-2926.	6744.	-4955.	8077.	34.	-6125.	-2725.	-81.	6.	88.	8.
6	3.633	-2.853	8858.	-7216.	6911.	-11618.	9767.	-523.	-9165.	-146.	-46.	4.	113.	-6.
7	4.262	-3.287	9319.	-12976.	9479.	-15617.	10457.	-1075.	-11947.	1178.	-128.	-8.	155.	-36.
8	2.633	-1.981	8805.	-4045.	9057.	-6162.	7814.	467.	-5110.	118.	-95.	-8.	78.	0.
9	1.959	-1.076	11178.	-8807.	8116.	-7158.	12559.	1103.	-6621.	-725.	-126.	18.	122.	25.
10	1.383	-4.051	10211.	-8476.	11595.	-11868.	10305.	372.	-8128.	462.	-214.	-16.	187.	-16.
11	.813	-3.098	12408.	-9235.	14577.	-11895.	10729.	-281.	-8315.	1958.	-266.	2.	128.	-7.
12	2.528	-1.993	7757.	-6597.	5574.	-8558.	9112.	1878.	-5726.	-776.	-72.	8.	105.	34.
13	5.088	-1.270	4160.	-3310.	2544.	-3711.	4841.	112.	-3052.	-485.	-24.	12.	64.	8.
14	3.763	-.585	757.	-3617.	-118.	-2819.	1407.	-615.	-3675.	-457.	25.	12.	48.	-15.
15	4.098	.138	-408.	-1383.	-1939.	-316.	3.	550.	-1852.	887.	43.	-7.	37.	-2.
16	4.877	1.012	-4888.	241.	-6774.	2758.	-5870.	184.	-421.	1757.	102.	-6.	58.	-1.
SIGMA								868.		1971.		8.		18.

HARMONIC COMPONENTS: HUB MOMENTS HUB SHEAR FORCES

N	T1C	T1S	Mac	L4c	Mnc	L4c	Y2c	X2c	Y4c	X4c
1	2.623	-1.994	-9111.	-1586.	6906.	2567.	35.	35.	-62.	-86.
2	1.963	-1.529	-2621.	3301.	2750.	3458.	58.	-70.	-8.	-50.
3	1.128	-.889	-3611.	6135.	1748.	7068.	90.	-72.	-13.	-92.
4	.276	-.089	-413.	11737.	-769.	11611.	91.	-188.	11.	-15.
5	2.078	-2.187	-3614.	-2596.	6885.	3529.	60.	35.	-61.	-95.
6	3.633	-2.853	-4229.	-5214.	5693.	7891.	88.	98.	-32.	-87.
7	4.262	-3.287	-5910.	-8788.	4829.	11392.	89.	230.	-8.	-98.
8	2.633	-1.981	-3767.	-2037.	6867.	1074.	81.	47.	-46.	-89.
9	1.959	-1.076	-7765.	-1411.	6766.	2819.	80.	74.	-35.	-95.
10	1.383	-4.051	-14348.	-478.	5057.	5147.	152.	55.	-62.	-82.
11	.813	-5.098	-13709.	1231.	4929.	5544.	208.	52.	-56.	-68.
12	2.528	-1.993	-1776.	-7018.	5317.	10222.	28.	31.	-52.	-98.
13	5.088	-1.270	-517.	-10647.	5454.	13983.	-6.	22.	-28.	-98.
14	3.763	-.585	1308.	-2295.	2867.	3478.	-45.	24.	-20.	-19.
15	4.098	.138	4256.	-2814.	4254.	-741.	-72.	25.	-28.	-19.
16	4.877	1.012	7805.	-2017.	6154.	-1858.	-145.	15.	-41.	-17.

Table I. (Continued)

TEST 7 LOCKED GYRO MODE

VKT = 69.13 RPM = 137.0 MU = 0.69 P = 1.04

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (MEAN COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
1275.30	29406.32	-15.71	-614.88
3846.00	-8847.56	-24.64	149.09
7403.94	5451.54	-110.27	-110.77

N	T1C	T1S	Lsh	Msh	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	1.069	-.979	2854.	15101.	10289.	15584.	-428.	2293.	14879.	1538.	19.	-55.	-298.	69.
2	.591	-.576	4376.	22298.	16916.	22469.	-1158.	38.	22208.	2782.	7.	-31.	-802.	-39.
3	.088	-.368	4982.	27115.	18766.	27857.	-1094.	58.	26771.	111.	30.	5.	-551.	12.
4	1.252	-.816	5180.	13672.	15240.	15674.	1614.	2572.	12781.	155.	89.	30.	-322.	16.
5	1.478	-1.307	-1071.	8754.	5072.	11098.	-3777.	125.	7716.	-11.	94.	-9.	-248.	4.
6	1.966	-1.272	575.	5454.	4240.	6935.	-1349.	815.	4798.	1688.	59.	-27.	-175.	8.
7	.971	-1.194	-1262.	16579.	7487.	16107.	-5108.	-500.	13885.	550.	81.	-40.	-569.	-11.
8	.725	-1.883	-7279.	12812.	-705.	17481.	-10133.	192.	10766.	-1589.	187.	0.	-259.	63.
9	.701	-2.667	-15447.	10427.	-8868.	18818.	-13537.	-1998.	7483.	-419.	316.	35.	-265.	-58.
10	1.106	-.888	715.	13050.	9703.	16247.	-3288.	-1352.	11835.	-2038.	129.	86.	-365.	-12.
11	1.462	-.176	8028.	13061.	17282.	12722.	5945.	-475.	13202.	-467.	-14.	17.	-370.	7.
12	2.009	.719	15586.	11205.	26107.	7771.	10943.	-1765.	12711.	-829.	-157.	13.	-421.	-26.
SIGMA								1554.		1145.		35.		28.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (3P COS COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
-8868.61	-7897.94	388.38	510.78
6418.78	3482.43	-256.33	-220.07
114.55	-6932.85	51.88	225.85

N	T1C	T1S	Lsh	Msh	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	1.069	-.979	-2567.	1307.	-2887.	2929.	-2699.	-589.	591.	1098.	85.	-40.	-18.	-72.
2	.591	-.576	-8867.	-1350.	-15432.	5390.	-5969.	-836.	-4519.	-729.	279.	39.	265.	12.
3	.088	-.368	-12224.	-2537.	-23884.	5874.	-7078.	1313.	-6288.	-962.	349.	-18.	468.	54.
4	1.252	-.816	-3824.	2514.	-2900.	6897.	-5075.	-2158.	1482.	2226.	95.	28.	-5.	-55.
5	1.478	-1.307	1598.	306.	3428.	118.)	793.	315.	677.	-1541.	-18.	-13.	-75.	37.
6	1.966	-1.272	6350.	1749.	10156.	-1578.	4689.	1057.	3214.	-44.	-135.	-18.	-152.	58.
7	.971	-1.194	-3058.	372.	-4204.	2567.	-2551.	211.	-595.	-997.	88.	-35.	46.	18.
8	.725	-1.883	-3000.	6420.	363.	9051.	-4471.	-52.	5257.	2143.	195.	-32.	-134.	-69.
9	.701	-2.667	-2015.	8180.	5817.	13118.	-4651.	214.	5999.	-1090.	198.	64.	-211.	23.
10	1.106	-.888	-7989.	578.	-8225.	3911.	-2643.	-483.	-1035.	-265.	117.	34.	40.	-17.
11	1.462	-.176	-97.	-5722.	-4439.	-5313.	1816.	1311.	-5800.	-5961.	16.	-21.	174.	26.
12	2.009	.719	2022.	-8862.	-3802.	-7209.	3990.	-202.	-8612.	83.	-59.	29.	209.	-28.
SIGMA								950.		1151.		35.		43.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (3P SIN COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
6678.65	-9815.77	-217.62	282.52
-1569.28	6469.62	53.08	-217.03
4368.04	787.98	-288.39	-138.54

N	T1C	T1S	Lsh	Msh	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	1.069	-.979	-822.	-3548.	-4719.	-1957.	896.	189.	-4244.	-571.	64.	39.	158.	-2.
2	.591	-.576	1225.	-7607.	-4248.	-9529.	5633.	395.	-6755.	-309.	-77.	0.	219.	18.
3	.088	-.368	1461.	-11433.	-4855.	-16340.	6934.	-47.	-9529.	50.	-100.	-48.	272.	-28.
4	1.252	-.816	-1892.	-2858.	-7047.	60.	381.	-770.	-4145.	-1778.	117.	117.	206.	109.
5	1.478	-1.307	-1888.	-900.	-2507.	121.	-1803.	-257.	-1349.	-44.	41.	-67.	25.	-87.
6	1.966	-1.272	-1578.	2563.	-1777.	4863.	-1478.	482.	1548.	-338.	92.	-38.	8.	7.
7	.971	-1.194	159.	-2859.	-5687.	-3237.	1845.	1901.	-2678.	1740.	-15.	-74.	153.	-54.
8	.725	-1.883	-8372.	-2823.	-17005.	2358.	-4565.	-1970.	-5101.	1484.	247.	20.	345.	-5.
9	.701	-2.667	-11088.	-3552.	-25076.	5143.	-5788.	276.	-7064.	277.	339.	-8.	488.	22.
10	1.106	-.888	-442.	-4718.	-5875.	-2596.	1684.	599.	-5734.	-2327.	93.	85.	209.	71.
11	1.462	-.176	6308.	-1389.	7011.	-4589.	3114.	-501.	51.	575.	-129.	-4.	-109.	-78.
12	2.009	.719	9862.	1926.	15122.	-5634.	6588.	-276.	6971.	1278.	-298.	-19.	-242.	25.
SIGMA								882.		1387.		38.		36.

HARMONIC COMPONENTS: HUB MOMENTS HUB SHEAR FORCES

N	T1C	T1S	M2C	L2C	MoC	LoC	Y2C	X4C	YoC	XoC
1	1.069	-.979	-152.	-3472.	744.	772.	-61.	110.	25.	-45.
2	.591	-.576	-3078.	-6362.	-343.	393.	170.	244.	93.	25.
3	.088	-.368	-5810.	-8584.	-676.	1226.	328.	508.	138.	54.
4	1.252	-.816	561.	-3409.	922.	536.	-61.	151.	58.	-55.
5	1.478	-1.307	1140.	-278.	-483.	1071.	-97.	5.	-16.	-20.
6	1.966	-1.272	2546.	3108.	868.	1566.	-122.	-62.	-38.	-71.
7	.971	-1.194	-1220.	-2614.	535.	63.	31.	130.	18.	-59.
8	.725	-1.883	4910.	-4788.	347.	515.	-170.	225.	37.	-129.
9	.701	-2.667	5895.	-5758.	106.	1306.	-288.	359.	59.	-141.
10	1.106	-.888	-1350.	-4091.	915.	1648.	-22.	173.	71.	-56.
11	1.462	-.176	-3507.	934.	-593.	883.	151.	-46.	22.	82.
12	2.009	.719	-8599.	6660.	-33.	-591.	252.	-100.	-63.	102.

Table I. (Continued)

TEST 8 LOCKED GYRO MODE

VKT = 68.43 RPM = 135.3 MU = 0.50 P = 1.65

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (1P COS COMPONENT)

DMM1:d(0)	DMM2:d(T1C)	DMM3:d(T1S)		
d(Lh)	d(Mh)	d(Fx)	d(Fy)	
6613.92	31780.07	-26.31	-531.57	
35373.83	-9562.58	-3.88	130.16	
7883.02	9221.86	-136.46	-46.93	

#	T1C	T1S	Lab	Mab	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	1.861	-1.375	1387.	8587.	4540.	13519.	-116.	-672.	7311.	-700.	144.	2.	-127.	38.
2	1.277	-.869	9883.	16167.	10774.	18949.	1123.	-1284.	19472.	-1851.	187.	26.	-268.	11.
3	.681	-.553	7588.	26869.	18987.	25781.	3244.	606.	26156.	1970.	61.	-2.	-618.	-28.
4	1.996	-1.253	5337.	8361.	6461.	11499.	1750.	-117.	8215.	-280.	131.	6.	-166.	7.
5	2.230	-1.503	2174.	8073.	5589.	10522.	776.	61.	8371.	1163.	154.	-6.	-127.	-31.
6	2.761	-1.971	-1172.	-1118.	-1142.	4868.	-1184.	-139.	-5876.	150.	231.	17.	-1.	-19.
7	2.013	-1.261	2662.	7497.	6421.	11471.	1151.	-717.	8417.	-1051.	163.	19.	-133.	15.
8	1.668	-1.976	-3516.	2458.	-1211.	13735.	-4527.	677.	3589.	-1016.	291.	12.	-28.	31.
9	1.392	-2.744	-19618.	6666.	-8211.	18774.	-11665.	578.	5863.	651.	387.	-8.	-66.	-18.
10	2.000	-1.368	1588.	8134.	6015.	11397.	761.	-264.	8788.	541.	116.	-15.	-168.	-6.
11	2.175	-.734	4468.	8739.	19779.	6804.	7520.	320.	8696.	657.	22.	-35.	-176.	3.
12	2.797	.018	17378.	6707.	21527.	4735.	19558.	805.	6951.	794.	-57.	-22.	-164.	3.
13	3.359	.872	25197.	3577.	27017.	147.	25167.	-362.	4776.	-481.	-127.	20.	-174.	-1.
SIGMA								956.		785.		18.		15.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (1P COS COMPONENT)

DMM1:d(0)	DMM2:d(T1C)	DMM3:d(T1S)		
d(Lh)	d(Mh)	d(Fx)	d(Fy)	
-8377.63	-8663.19	673.98	553.44	
6962.12	2779.71	-233.70	-220.19	
173.80	-8550.48	58.65	288.82	

#	T1C	T1S	Lab	Mab	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	1.861	-1.375	3868.	3689.	7575.	2178.	1044.	520.	4352.	576.	-49.	-29.	-181.	-42.
2	1.277	-.869	-938.	1705.	-1754.	4349.	-575.	1617.	854.	1161.	101.	-24.	51.	-58.
3	.681	-.553	-10598.	-1385.	-14396.	6347.	-6576.	-1484.	-4776.	-964.	343.	25.	356.	68.
4	1.996	-1.253	3305.	3726.	9684.	2550.	591.	-716.	4262.	686.	-47.	13.	-266.	-99.
5	2.230	-1.503	6327.	1953.	8959.	-455.	2689.	253.	5016.	-7534.	-97.	53.	-169.	102.
6	2.761	-1.971	9168.	83368.	20294.	-498.	9202.	-898.	9569.	-158.	-273.	3.	-449.	23.
7	2.013	-1.261	6013.	4685.	9590.	1014.	1553.	162.	6202.	2617.	-149.	-61.	-223.	-78.
8	1.668	-1.976	2883.	6973.	9205.	5728.	-28.	625.	7537.	1015.	-50.	-26.	-256.	-50.
9	1.392	-2.744	877.	19861.	8567.	11075.	-2512.	-565.	10788.	955.	9.	17.	-598.	18.
10	2.000	-1.368	3181.	950.	6642.	311.	1611.	500.	1231.	-7941.	-28.	62.	-149.	33.
11	2.175	-.734	3258.	-1535.	5226.	-2235.	3259.	976.	-1259.	-7561.	-97.	67.	1.	88.
12	2.797	.018	5753.	-755.	8208.	-5205.	6671.	-835.	1205.	2186.	-178.	-2.	-98.	-30.
13	3.359	.872	8541.	-6984.	8160.	-13648.	8687.	45.	-6829.	-42.	-269.	-8.	9.	15.
SIGMA								884.		1710.		95.		59.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (1P SIN COMPONENT)

DMM1:d(0)	DMM2:d(T1C)	DMM3:d(T1S)		
d(Lh)	d(Mh)	d(Fx)	d(Fy)	
7730.82	-12439.99	-182.88	376.38	
-2648.78	6456.95	14.47	-258.16	
6284.63	196.26	-184.58	-110.61	

#	T1C	T1S	Lab	Mab	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	1.861	-1.375	-5021.	1485.	-6485.	6872.	-6198.	-1646.	1464.	1429.	84.	-19.	75.	-91.
2	1.277	-.869	-2913.	-5988.	-7274.	-1318.	386.	-459.	-4758.	660.	82.	39.	219.	93.
3	.681	-.553	2196.	-10547.	-6845.	-12621.	5458.	1717.	-9648.	-1995.	-81.	-46.	246.	6.
4	1.996	-1.253	-4868.	784.	-6769.	6284.	-6927.	-1625.	-745.	-952.	161.	82.	78.	71.
5	2.230	-1.503	-3283.	1951.	-3287.	3299.	-3259.	783.	1762.	-478.	95.	-68.	1.	-28.
6	2.761	-1.971	-3243.	6112.	-5151.	10989.	-5352.	1969.	9484.	-477.	194.	-7.	-4.	56.
7	2.013	-1.261	-3748.	1885.	-5538.	6382.	-3333.	-895.	814.	551.	97.	18.	54.	6.
8	1.668	-1.976	-7789.	1128.	-11918.	6183.	-8868.	-588.	-1978.	1016.	198.	13.	268.	28.
9	1.392	-2.744	-11782.	-978.	-21328.	7417.	-7858.	-546.	-6678.	-784.	358.	34.	578.	-1.
10	2.000	-1.368	-3599.	715.	-5346.	3481.	-3259.	598.	-17.	-194.	87.	-34.	25.	-41.
11	2.175	-.734	2003.	1536.	4721.	-416.	886.	1626.	2629.	1411.	-70.	-81.	-140.	-80.
12	2.797	.018	9315.	3992.	9482.	2292.	505.	-485.	4739.	-927.	-68.	37.	-267.	30.
13	3.359	.872	8829.	7176.	21992.	1838.	5883.	-521.	9525.	178.	-716.	16.	-523.	-9.
SIGMA								1183.		938.		62.		50.

HARMONIC COMPONENTS:			HUB MOMENTS				HUB SHEAR FORCES			
#	T1C	T1S	M2C	L2C	M4C	L4C	Y4C	X2C	Y4C	X4C
1	1.861	-1.375	6274.	1952.	78.	-12.	-192.	7.	-48.	-88.
2	1.277	-.869	174.	-2162.	480.	1587.	-15.	157.	67.	-84.
3	.681	-.553	-8125.	-8036.	341.	1462.	218.	297.	197.	11.
4	1.996	-1.253	6235.	-101.	207.	892.	-194.	16.	-82.	-42.
5	2.230	-1.503	3153.	1961.	-117.	719.	-192.	-48.	-67.	-40.
6	2.761	-1.971	7580.	6135.	1998.	157.	-519.	-148.	-126.	-194.
7	2.013	-1.261	6797.	1188.	1484.	587.	-180.	-45.	-43.	-108.
8	1.668	-1.976	8285.	-840.	1255.	526.	-228.	98.	-28.	-169.
9	1.392	-2.744	9398.	-9895.	1652.	1885.	-522.	191.	16.	-183.
10	2.000	-1.368	1745.	797.	-556.	816.	-183.	6.	-46.	-86.
11	2.175	-.734	-1038.	2841.	-226.	618.	68.	-88.	-90.	61.
12	2.797	.018	305.	6795.	980.	-36.	-19.	-217.	-83.	36.
13	3.359	.872	-9548.	8868.	-685.	-819.	111.	-305.	-102.	190.

Table I. (Continued)

TEST 9 LOCKED GYRO MODE

VKT = 69.30 RPM = 86.4 MU = 0.78 P = 2.28

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (MEAN COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
3963.33	21551.25	-21.30	-467.46
356.23	-5298.75	-8.64	79.77
4057.83	5131.45	-63.79	-67.98

N	T1C	T1S	Lsb	Msb	Lic	Mic	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	1.788	-0.902	3725.	8946.	10005.	40189.	955.	-43e.	8836.	336.	10.	-15.	-421.	13.
2	0.929	-0.547	3604.	13753.	12669.	46511.	-383.	-2048.	43610.	-1584.	34.	45.	-965.	-9.
3	0.322	-0.061	9070.	20981.	28180.	48895.	6169.	753.	46935.	282.	-8.	12.	-966.	-7.
4	1.742	-0.823	9849.	11891.	13283.	21279.	2592.	1786.	12153.	2467.	-16.	-44.	-293.	-42.
5	2.142	-1.122	1318.	6591.	6570.	7852.	-987.	-756.	6840.	-648.	30.	14.	-244.	14.
6	2.760	-1.656	-648.	2398.	3806.	4709.	-2258.	-68.	1376.	-362.	92.	26.	-106.	-11.
7	1.539	-0.864	3288.	40452.	10775.	11256.	-13.	-662.	40098.	-595.	34.	8.	-49e.	-13.
8	1.008	-1.580	2620.	13912.	9707.	44490.	-782.	1763.	43648.	4384.	43.	-50.	-441.	-44.
9	0.671	-2.087	-3020.	41296.	3034.	46516.	-5489.	-10442.	46670.	-1591.	448.	23.	-243.	34.
10	1.672	-0.798	9148.	10636.	12050.	40914.	463.	-284.	40997.	322.	11.	-7.	-216.	-36.
11	1.888	-0.322	6089.	9148.	12176.	9288.	3943.	489.	9076.	-1462.	0.	14.	-245.	54.
12	2.359	0.342	46537.	9504.	46105.	7761.	5542.	-435.	10266.	461.	-70.	-14.	-498.	0.
SIGMA								1059.		1287.		49.		43.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (3P COS COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
20884.29	-32088.28	-155.56	595.31
-5723.71	13937.84	22.51	-263.02
9113.86	134.80	-140.75	-29.88

N	T1C	T1S	Lsb	Msb	Lic	Mic	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	1.788	-0.902	299.	-6574.	-2852.	-7212.	4687.	-764.	-6449.	1167.	-26.	-57.	140.	-46.
2	0.929	-0.547	3857.	-18377.	-5589.	-2166.	8021.	-2559.	-23508.	-6285.	964.	706.	276.	11.
3	0.322	-0.061	12935.	-31112.	-780.	-41196.	14064.	976.	-26649.	965.	-443.	-444.	954.	39.
4	1.742	-0.823	5759.	-9285.	1490.	-12692.	7460.	4045.	-7734.	482.	-136.	-135.	435.	-7.
5	2.142	-1.122	-4173.	-1755.	-6234.	467.	-3272.	-1670.	-2469.	-418.	403.	53.	84.	47.
6	2.760	-1.656	-9756.	6342.	-8777.	11392.	-10176.	-159.	4223.	-1344.	242.	82.	-39.	44.
7	1.538	-0.864	1269.	-10246.	-3618.	-11833.	3422.	-764.	-9943.	1270.	-44.	-84.	193.	-41.
8	1.008	-1.580	-235.	-18883.	-9126.	-19756.	3643.	4965.	-27913.	4430.	-24.	4140.	334.	-44.
9	0.671	-2.087	-8224.	-26176.	-21555.	-16802.	-5873.	-1494.	-21630.	1438.	235.	-14.	485.	4.
10	1.672	-0.798	3488.	-9356.	-900.	-11540.	4845.	402.	-8385.	453.	-87.	-84.	160.	-40.
11	1.888	-0.322	6159.	-5040.	3866.	-8110.	7174.	34.	-3756.	2077.	-444.	-59.	42.	-49.
12	2.359	0.342	10323.	-655.	11180.	-5092.	9333.	-263.	1552.	480.	-179.	-24.	-34.	1.
SIGMA								4848.		4130.		428.		43.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (3P SIN COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
28583.53	20735.42	-673.59	-521.28
-12672.89	-6064.87	285.03	156.88
-1218.78	10260.98	-1.08	-209.84

N	T1C	T1S	Lsb	Msb	Lic	Mic	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	1.788	-0.902	7508.	-862.	8645.	-6526.	7002.	-639.	753.	73.	-147.	48.	-45.	7.
2	0.929	-0.547	19051.	2116.	25079.	-8469.	16383.	-1283.	8234.	-2235.	-407.	2.	-441.	44.
3	0.322	-0.061	32216.	12357.	44066.	-3168.	26974.	4350.	13134.	4036.	-621.	-53.	-476.	-46.
4	1.742	-0.823	9513.	5249.	15423.	-1041.	7784.	-82.	2403.	5168.	-149.	7.	-134.	-41.
5	2.142	-1.122	4449.	-6676.	-87.	-7475.	3565.	348.	-6343.	-2556.	-52.	30.	142.	51.
6	2.760	-1.656	-6726.	-11883.	-18764.	-12330.	-2089.	1745.	-11342.	458.	88.	-55.	238.	-40.
7	1.539	-0.864	11150.	-476.	13496.	-6835.	10109.	-347.	4228.	-211.	-254.	-28.	-48.	5.
8	1.008	-1.580	19438.	-3423.	22251.	-12958.	18166.	413.	3357.	2345.	-367.	-43.	-144.	-42.
9	0.671	-2.087	20914.	-11889.	18342.	-23088.	22034.	-751.	-6567.	-2135.	-448.	52.	403.	81.
10	1.672	-0.798	9238.	1187.	12747.	-9631.	7686.	-1049.	5309.	401.	-123.	-4.	-144.	-48.
11	1.888	-0.322	6326.	4712.	8462.	1925.	3467.	-8.	5937.	-44.	-111.	49.	-43.	74.
12	2.359	0.342	473.	3251.	5812.	9478.	-1888.	-827.	9148.	-794.	0.	11.	-248.	0.
SIGMA								1823		1869.		46.		53.

HARMONIC COMPONENTS: HUB MOMENTS HUB SHEAR FORCES

N	T1C	T1S	Mzc	Lzc	Mnc	Lsc	Yzc	Xzc	Yzc	Zsc
1	1.788	-0.902	-4645.	1226.	357.	467.	136.	-35.	-10.	10.
2	0.929	-0.547	-20848.	7547.	-4563.	714.	382.	244.	-14.	445.
3	0.322	-0.061	-28811.	19125.	163.	-65.	586.	-439.	-35.	35.
4	1.742	-0.823	-7788.	6296.	-6.	1225.	162.	-148.	-7.	10.
5	2.142	-1.122	-9217.	-4797.	348.	1526.	57.	102.	15.	1.
6	2.760	-1.656	4101.	-11360.	1012.	1182.	-58.	221.	10.	-19.
7	1.539	-0.864	-9826.	2874.	283.	548.	435.	-79.	-29.	45.
8	1.008	-1.580	-28044.	2520.	325.	1189.	377.	-82.	-23.	32.
9	0.671	-2.087	-21842.	-5410.	192.	1537.	487.	119.	19.	18.
10	1.672	-0.798	-20935.	14077.	-349.	768.	176.	-114.	-17.	26.
11	1.888	-0.322	-4612.	6558.	856.	619.	102.	-102.	-8.	-19.
12	2.359	0.342	1806.	9562.	-274.	396.	-22.	-186.	-45.	18.

Table I. (Continued)

TEST 16 LOCKED GYRO MODE

VKT = 60.40 RPM = 60.2 MU = 1.13 P = 3.08

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (PEAK COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
1596.89	16790.17	-58.46	-393.69
888.88	-3892.53	8.58	62.46
2761.58	1726.27	-49.12	-35.05

N	T1C	T1S	Lab	Mab	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	2.515	-1.998	-1573.	6082.	2237.	6614.	-1251.	-1408.	2964.	-1594.	191.	38.	-152.	16.
2	2.214	-1.531	1190.	6767.	6615.	7881.	-1099.	-287.	8278.	-137.	42.	6.	-209.	-7.
3	1.501	-1.094	3634.	10734.	10352.	10786.	383.	574.	10705.	1064.	2.	-9.	-277.	-15.
4	2.528	-1.949	-327.	5125.	3988.	6784.	-2228.	-525.	6488.	-197.	87.	6.	-173.	-5.
5	3.329	-2.648	-2483.	816.	-2564.	3864.	-2544.	-161.	-528.	-1479.	172.	30.	-6.	95.
6	4.161	-3.052	-2017.	-594.	86.	2326.	-2562.	467.	-1542.	1617.	109.	-21.	-84.	-57.
7	2.622	-1.884	2325.	7267.	7128.	7785.	204.	1017.	7034.	1455.	21.	-57.	-192.	-16.
8	2.803	-2.704	-2599.	6179.	2334.	8452.	-4825.	-283.	5189.	57.	99.	-4.	-184.	-15.
9	1.450	-3.429	-4855.	6918.	-480.	9887.	-6834.	-174.	5814.	-192.	118.	-7.	-178.	5.
10	2.484	-1.911	837.	5357.	5207.	6860.	-1089.	547.	6641.	-126.	60.	1.	-179.	-5.
11	2.930	-1.035	2379.	6057.	6305.	5135.	838.	-484.	3580.	-1192.	45.	25.	-157.	17.
12	3.606	-0.469	4923.	4202.	9344.	3592.	2958.	-108.	4526.	639.	-28.	-99.	-177.	-13.
SIGMA								758.		1056.		21.		36.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (3P COS COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
14575.37	-2812.98	-246.81	25.63
-4495.09	2868.59	78.98	-51.86
2604.38	2654.12	-97.67	-62.69

N	T1C	T1S	Lab	Mab	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	2.515	-1.998	-4754.	-1941.	-6086.	145.	-4167.	-2613.	-2765.	-39.	88.	34.	55.	-17.
2	2.214	-1.531	298.	-2812.	-1463.	-1895.	1071.	128.	-3253.	-1184.	39.	66.	70.	24.
3	1.501	-1.094	5177.	-2578.	6572.	-5816.	5442.	245.	-1258.	1189.	-122.	-44.	24.	-22.
4	2.528	-1.949	-937.	-3530.	-3115.	-1088.	54.	1578.	-4291.	-1743.	89.	45.	98.	34.
5	3.329	-2.648	-6541.	-457.	-9615.	2653.	-8136.	-1879.	-1710.	485.	137.	-14.	61.	-31.
6	4.161	-3.052	-11272.	542.	-13908.	5734.	-10788.	1185.	-1746.	949.	207.	-19.	84.	6.
7	2.622	-1.884	1692.	-1525.	-556.	-2302.	2681.	3523.	-1268.	1329.	-79.	-41.	99.	24.
8	2.803	-2.704	-2961.	-5027.	-6518.	-4350.	-1451.	-520.	-4762.	-1126.	67.	14.	135.	5.
9	1.450	-3.429	-5104.	-7480.	-7727.	-6026.	-1065.	-877.	-8087.	812.	57.	4.	185.	-8.
10	2.484	-1.911	-822.	-2151.	-2692.	-1820.	3.	1188.	-2295.	244.	13.	-28.	75.	9.
11	2.930	-1.035	-2423.	738.	-2181.	1702.	-2537.	-1058.	284.	-621.	39.	19.	-28.	-7.
12	3.606	-0.469	-1689.	5769.	-283.	6588.	-2294.	-655.	5494.	589.	25.	1.	-98.	-2.
SIGMA								1819.		986.		32.		17.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (3P SIN COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
5750.68	10783.95	-124.26	-244.73
-2716.92	-3265.52	67.59	73.08
-3125.21	2884.26	59.12	-35.15

N	T1C	T1S	Lab	Mab	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	2.515	-1.998	4696.	-3174.	4296.	-4482.	4761.	-425.	-2596.	-1965.	-52.	36.	12.	7.
2	2.214	-1.531	5262.	-1944.	5736.	-3298.	4461.	1961.	-37.	-458.	-99.	-11.	28.	69.
3	1.501	-1.094	5535.	1349.	9177.	-566.	5367.	275.	1192.	-1434.	-77.	19.	-106.	-9.
4	2.528	-1.949	5788.	-2547.	4656.	-4772.	5284.	1304.	-1565.	-76.	-89.	-9.	45.	17.
5	3.329	-2.648	2574.	-5381.	558.	-6962.	5171.	-1170.	-6191.	-1095.	-23.	36.	75.	-12.
6	4.161	-3.052	5182.	-11276.	-1218.	-11578.	5115.	1159.	-9593.	-598.	-45.	-9.	179.	5.
7	2.622	-1.884	4969.	-670.	5730.	-3176.	4627.	-455.	725.	1754.	-109.	-29.	-91.	-28.
8	2.803	-2.704	4829.	-2518.	5773.	-5077.	4551.	-209.	1896.	9259.	-104.	-59.	-6.	-5.
9	1.450	-3.429	12119.	-9725.	13096.	-8257.	11969.	-568.	-1728.	-662.	-181.	8.	-31.	-13.
10	2.484	-1.911	4973.	-2447.	4495.	-3603.	5027.	-1154.	-1936.	-467.	-46.	36.	-18.	-22.
11	2.930	-1.035	1192.	-1574.	528.	-2127.	1478.	653.	-1748.	-908.	-4.	17.	29.	21.
12	3.606	-0.469	-3091.	345.	-2828.	14.	-3204.	-1104.	481.	1780.	-14.	-44.	-14.	-31.
SIGMA								992.		1389.		28.		24.

HARMONIC COMPONENTS: HUB MOMENTS HUB SHEAR FORCES

N	T1C	T1S	Mic	L1c	Mnc	Lnc	Y1c	X1c	Ync	Xnc
1	2.515	-1.998	-3745.	-5381.	988.	-786.	53.	46.	8.	54.
2	2.214	-1.531	-4857.	587.	1604.	584.	86.	28.	-18.	9.
3	1.501	-1.094	-3592.	3817.	2064.	1625.	30.	-114.	-26.	-8.
4	2.528	-1.949	-5285.	-755.	995.	810.	85.	67.	8.	22.
5	3.329	-2.648	-2641.	-7128.	731.	-1057.	32.	94.	9.	21.
6	4.161	-3.052	-3431.	-9937.	1885.	-365.	72.	192.	17.	16.
7	2.622	-1.884	-2967.	1702.	1679.	978.	98.	-58.	-8.	1.
8	2.803	-2.704	-7857.	222.	885.	-1075.	184.	51.	-28.	37.
9	1.450	-3.429	-10025.	-1395.	1456.	336.	183.	13.	2.	44.
10	2.484	-1.911	-3001.	-967.	766.	978.	66.	-3.	14.	16.
11	2.930	-1.035	-847.	-2164.	881.	-375.	-1.	33.	-18.	8.
12	3.606	-0.469	3344.	-892.	145.	-1393.	-21.	7.	-38.	18.

Table I. (Continued)

TEST 11 LOCKED GYRO MODE

VKT = 68.66 RPM = 34.2 MU = 1.86 P = 5.16

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (1P COS COMPONENT)

ROW1:4(θ)	ROW2:4(T1C)	ROW3:4(T1S)	
d(Lh)	d(Mh)	d(Fx)	d(Fy)
3385.73	34786.74	-79.89	-344.87
-184.49	-2175.18	14.57	33.18
1413.74	926.05	-26.98	-24.85

N	T1C	T1S	Lab	Mab	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	3.700	-1.611	2020.	5346.	6129.	5630.	221.	-284.	5217.	-94.	11.	-9.	-221.	-6.
2	3.078	-1.212	3542.	7268.	8876.	6950.	401.	-254.	7587.	469.	-11.	-8.	-221.	-6.
3	2.314	-0.331	6037.	9198.	13017.	8880.	2957.	487.	9675.	224.	-46.	-7.	-279.	-20.
4	1.397	0.311	6818.	11379.	16377.	9536.	3685.	-95.	11861.	-174.	-49.	4.	-302.	4.
5	3.835	-1.765	1734.	4736.	5526.	5376.	68.	-114.	4439.	-414.	27.	5.	-151.	22.
6	4.760	-2.340	-487.	2594.	2677.	3987.	-1875.	-1077.	1694.	-629.	61.	15.	-126.	5.
7	5.470	-3.003	121.	1358.	2702.	5024.	-1052.	218.	823.	498.	67.	-11.	-108.	-18.
8	3.896	-1.677	1715.	5378.	7130.	6003.	735.	448.	5150.	551.	25.	4.	-189.	-7.
9	3.319	-2.256	1850.	5867.	6301.	6453.	-112.	301.	5605.	115.	29.	-4.	-179.	0.
10	2.761	-2.969	-91.	5581.	4295.	7269.	-2009.	-688.	5279.	-779.	55.	17.	-175.	4.
11	3.769	-1.611	2881.	5748.	7538.	5804.	918.	505.	5720.	415.	2.	-15.	-179.	1.
12	4.139	-0.911	4266.	5846.	9164.	5541.	2105.	771.	5977.	1039.	-12.	-16.	-196.	-11.
13	4.755	-0.243	3107.	3235.	7548.	3680.	1237.	-927.	3036.	-1187.	16.	22.	-178.	11.
SIGMA								598.		597.		12.		12.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (1P COS COMPONENT)

ROW1:4(θ)	ROW2:4(T1C)	ROW3:4(T1S)	
d(Lh)	d(Mh)	d(Fx)	d(Fy)
7038.83	-1428.50	-118.79	9.47
-1787.31	60.42	36.01	2.18
1338.68	2789.96	-25.66	-62.82

N	T1C	T1S	Lab	Mab	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	3.700	-1.611	-3548.	-4299.	-4959.	-2382.	-2924.	-1193.	-5150.	494.	77.	14.	56.	-30.
2	3.078	-1.212	-818.	-4484.	-2854.	-3490.	71.	176.	-4804.	-918.	37.	9.	82.	14.
3	2.314	-0.331	2364.	-2175.	1546.	-5642.	2725.	262.	-1519.	722.	-60.	-92.	33.	4.
4	1.397	0.311	5028.	-1411.	6307.	-5881.	5619.	650.	-410.	116.	-41.	-7.	-14.	-18.
5	3.835	-1.765	-2496.	-4497.	-4193.	-2701.	-1747.	432.	-5156.	898.	68.	-5.	68.	-26.
6	4.760	-2.340	-4768.	-6086.	-8595.	-5319.	-5126.	1382.	-7298.	279.	111.	-15.	163.	23.
7	5.470	-3.003	-7715.	-7349.	-10874.	-5542.	-6340.	420.	-9009.	535.	159.	-22.	124.	-26.
8	3.896	-1.677	-3197.	-4177.	-5193.	-2203.	-2635.	-432.	-4759.	1074.	51.	-22.	72.	-18.
9	3.319	-2.256	-3835.	-7478.	-7191.	-4560.	-2377.	-465.	-8759.	-1358.	117.	49.	152.	18.
10	2.761	-2.969	-3760.	-9364.	-7851.	-7775.	-1941.	-69.	-10958.	-678.	44.	-5.	164.	21.
11	3.769	-1.611	-3759.	-4223.	-5660.	-3060.	-2877.	-1052.	-4745.	908.	47.	-19.	77.	-10.
12	4.139	-0.911	-2289.	-4796.	-4659.	-1859.	-1262.	334.	-5963.	-2295.	115.	55.	94.	57.
13	4.755	-0.243	-2721.	-1542.	-5761.	-17.	-2261.	-477.	-2213.	-319.	61.	-5.	62.	11.
SIGMA								680.		934.		25.		21.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (1P SIN COMPONENT)

ROW1:4(θ)	ROW2:4(T1C)	ROW3:4(T1S)	
d(Lh)	d(Mh)	d(Fx)	d(Fy)
362.24	9729.05	-66.67	-152.29
-1122.53	-3108.78	36.76	65.37
-1488.21	788.53	32.64	-7.58

N	T1C	T1S	Lab	Mab	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	3.700	-1.611	-1537.	-2200.	-2477.	-2871.	-1122.	274.	-1991.	911.	-19.	-98.	58.	-18.
2	3.078	-1.212	-1414.	-1276.	-1815.	-540.	-1236.	55.	-1658.	-749.	26.	10.	16.	-8.
3	2.314	-0.331	-1110.	2482.	-1174.	2708.	-1091.	661.	2381.	76.	9.	1.	3.	27.
4	1.397	0.311	-1003.	5179.	1091.	5028.	-1225.	-257.	5272.	-933.	-7.	-2.	-84.	-13.
5	3.835	-1.765	-1662.	-4389.	-3292.	-3849.	-943.	576.	-4624.	-1195.	22.	5.	65.	10.
6	4.760	-2.340	-1921.	-6158.	-5849.	-6657.	-189.	1241.	-6898.	-2142.	66.	29.	157.	57.
7	5.470	-3.003	-2094.	-8574.	-7866.	-7744.	-1871.	-557.	-8837.	543.	95.	-11.	111.	-27.
8	3.896	-1.677	-1714.	-1710.	-3367.	-1358.	-993.	524.	-1876.	1695.	14.	-8.	65.	8.
9	3.319	-2.256	-1427.	-1967.	-1104.	-2203.	-1562.	-1529.	-1855.	537.	-19.	8.	-11.	-46.
10	2.761	-2.969	-1086.	-1986.	570.	-3355.	-1281.	-595.	-1955.	-619.	-58.	7.	20.	5.
11	3.769	-1.611	-1191.	-1741.	-2816.	-1301.	-345.	1128.	-1715.	1403.	-7.	-22.	60.	18.
12	4.139	-0.911	-1155.	-2703.	-5177.	-3350.	-3849.	-771.	-4245.	482.	54.	-2.	61.	-21.
13	4.755	-0.243	-6252.	-4545.	-8148.	-1784.	-5413.	-488.	-5768.	-965.	111.	11.	78.	-9.
SIGMA								781.		1026.		18.		25.

HARMONIC COMPONENTS:			HUB MOMENTS			HUB SHEAR FORCES			
N	T1C	T1S	MJC	LJC	MoC	LoC	YJC	XoC	YoC	XoC
1	3.700	-1.611	-1014.	-2658.	-3136.	-466.	38.	58.	14.	20.
2	3.078	-1.212	-1784.	-684.	-3020.	775.	28.	26.	54.	18.
3	2.314	-0.331	-214.	2552.	-1295.	171.	12.	-29.	21.	-31.
4	1.397	0.311	758.	5461.	-1167.	169.	-6.	-87.	-13.	-4.
5	3.835	-1.765	-2197.	-5185.	-3949.	1459.	25.	67.	45.	2.
6	4.760	-2.340	-3555.	-8357.	-5744.	2821.	61.	134.	102.	-25.
7	5.470	-3.003	-3867.	-7880.	-9440.	3249.	58.	131.	75.	31.
8	3.896	-1.677	-1873.	-2235.	-2868.	-389.	29.	58.	45.	-7.
9	3.319	-2.256	-2709.	-2105.	-5159.	-272.	72.	55.	61.	44.
10	2.761	-2.969	-3679.	-1647.	-4389.	-296.	119.	42.	54.	22.
11	3.769	-1.611	-2194.	-2295.	-2539.	-582.	60.	58.	37.	-11.
12	4.139	-0.911	-1132.	-2267.	-4851.	1026.	20.	78.	74.	37.
13	4.755	-0.243	1698.	-4914.	-3815.	1753.	-55.	68.	76.	-7.

Table I. (Continued)

TEST 13 LOCKED GYRO MODE

VKT = 80.58 RPM = 127.2 MU = 0.40 P = 1.35

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (1P SIN COMPONENT)

DMU1:d(B)	DMU2:d(T1C)	DMU3:d(T1S)	
d(Mx)	d(My)	d(Fx)	d(Fy)
1162.75	45085.01	30.88	-527.78
8164.28	-17193.56	-57.13	177.68
14728.58	11246.06	-180.13	-72.77

N	T1C	T1S	Mxb	Myb	L1c	M1c	Th	d(Mh)	Mh	d(My)	Fx	d(Fx)	Fy	d(Fy)
1	.525	-.425	6867.	31722.	10216.	35634.	2230.	1051.	29888.	-1173.	156.	58.	-375.	27.
2	3.141	-1.058	5888.	-27235.	755.	-21354.	9578.	45.	-23757.	-1782.	154.	57.	171.	16.
3	1.633	-1.116	5858.	5133.	6858.	11355.	1369.	1525.	7706.	-185.	128.	-48.	-152.	49.
4	2.192	-1.966	-4534.	-8731.	-4868.	-1878.	-14525.	956.	-11745.	1887.	270.	-6.	1.	6.
5	1.395	-.871	6753.	15044.	11685.	16232.	1630.	-1114.	13609.	2256.	138.	3.	-278.	-61.
6	1.789	-.861	7237.	6020.	10588.	6458.	5762.	-207.	2963.	-3841.	58.	-7.	-155.	18.
7	2.282	-1.231	6178.	-7540.	6673.	-6106.	6058.	-1077.	-8958.	-2318.	128.	-17.	-16.	31.
8	1.483	-.515	3566.	7178.	7249.	10915.	2468.	-821.	5515.	-3564.	158.	18.	-134.	62.
9	1.684	-1.030	-8588.	-3613.	-6850.	4086.	-9953.	-1686.	-7812.	-2362.	308.	25.	-41.	3.
10	1.527	-2.570	-23648.	-5861.	-21833.	8277.	-24486.	2883.	-10835.	4548.	458.	-46.	-96.	-58.
11	1.337	-.851	5686.	13284.	11184.	15471.	5148.	277.	12883.	-438.	108.	-22.	-224.	5.
12	1.068	-.466	11368.	12515.	17535.	13922.	8604.	-2288.	11887.	358.	58.	17.	-268.	-47.
13	1.652	.287	27657.	14758.	33148.	11822.	25223.	262.	16831.	1307.	-117.	-8.	-218.	-18.
14	2.255	.782	48317.	15653.	45574.	5155.	37675.	2581.	18586.	3284.	-388.	-58.	-210.	-15.
SIGMA								1476.		2316.		32.		36.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (3P COS COMPONENT)

DMU1:d(B)	DMU2:d(T1C)	DMU3:d(T1S)	
d(Mx)	d(My)	d(Fx)	d(Fy)
-6263.75	-836.64	670.01	-267.27
5578.69	-1653.09	-443.09	242.60
88.86	-3364.56	57.55	55.96

N	T1C	T1S	Mxb	Myb	L1c	M1c	Th	d(Mh)	Mh	d(My)	Fx	d(Fx)	Fy	d(Fy)
1	.525	-.425	567.	2033.	5373.	7308.	-668.	631.	-511.	-632.	221.	-188.	-115.	61.
2	3.141	-1.058	7018.	-12454.	-6488.	-5881.	14961.	1838.	-350.	-1036.	-1044.	-281.	548.	185.
3	1.633	-1.116	3179.	1310.	2191.	-1888.	3835.	346.	2717.	1863.	-128.	-106.	67.	7.
4	2.192	-1.966	6810.	2178.	675.	-4766.	6775.	-758.	5234.	2258.	-278.	107.	169.	-14.
5	1.395	-.871	1357.	-1062.	1157.	835.	1565.	-2062.	-1821.	-2858.	76.	84.	8.	-40.
6	1.789	-.861	4627.	-2267.	1340.	-4264.	4186.	-254.	-2115.	-4672.	-125.	55.	109.	-26.
7	2.282	-1.231	5454.	-2311.	1036.	-14205.	7548.	-568.	2867.	1714.	-432.	-82.	178.	-47.
8	1.483	-.515	4430.	178.	1248.	-1903.	4121.	2128.	1034.	838.	-85.	-47.	136.	73.
9	1.684	-1.030	2183.	1627.	2151.	-1178.	3348.	-1702.	2867.	-358.	-112.	67.	33.	-46.
10	1.527	-2.570	6320.	6136.	6885.	7960.	3540.	-481.	5331.	-2192.	73.	264.	-71.	-68.
11	1.337	-.851	3283.	304.	1353.	-1817.	4016.	180.	1532.	1281.	-83.	-128.	74.	47.
12	1.068	-.466	4838.	-2256.	210.	-3835.	6843.	1956.	-1563.	12.	-63.	18.	165.	64.
13	1.652	.287	6488.	-5727.	-1161.	-8178.	8988.	382.	-4335.	285.	-126.	67.	232.	9.
14	2.255	.782	6161.	-8884.	-819.	-9177.	8385.	-2058.	-8632.	-1885.	-71.	258.	199.	-110.
SIGMA								1353.		1384.		148.		56.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (3P SIN COMPONENT)

DMU1:d(B)	DMU2:d(T1C)	DMU3:d(T1S)	
d(Mx)	d(My)	d(Fx)	d(Fy)
8712.23	-11068.18	-376.35	358.58
-2888.56	7135.00	58.66	-191.55
5844.71	-2788.96	-238.43	189.32

N	T1C	T1S	Mxb	Myb	L1c	M1c	Th	d(Mh)	Mh	d(My)	Fx	d(Fx)	Fy	d(Fy)
1	.525	-.425	2005.	-8032.	-1845.	-15868.	1857.	-1825.	-5870.	120.	-277.	-32.	154.	-28.
2	3.141	-1.058	-4415.	20511.	7134.	15675.	-4494.	-1541.	18188.	2161.	158.	1.	-461.	-35.
3	1.633	-1.116	-708.	2387.	1963.	1638.	-1951.	-2205.	2807.	327.	-31.	-1.	-188.	-36.
4	2.192	-1.966	-368.	9515.	8523.	12761.	-4575.	426.	8817.	-1571.	129.	-68.	-384.	-32.
5	1.395	-.871	3843.	-877.	2814.	-1732.	3434.	2187.	-218.	-1917.	-42.	94.	61.	64.
6	1.788	-.861	1982.	3932.	3726.	6859.	685.	210.	3695.	-357.	29.	108.	-92.	-19.
7	2.282	-1.231	-1705.	9767.	5586.	21858.	-5889.	-2657.	8838.	1.	104.	75.	-307.	-181.
8	1.483	-.515	524.	5285.	3457.	6760.	-768.	-1515.	5407.	3245.	-19.	61.	-117.	-71.
9	1.684	-1.030	-436.	7345.	5020.	12648.	-3192.	64.	5884.	-1145.	212.	64.	-258.	-5.
10	1.527	-2.570	655.	20239.	7434.	28019.	-2301.	4852.	8660.	-1493.	313.	-58.	-272.	267.
11	1.337	-.851	760.	855.	2877.	-1880.	-282.	-1754.	2868.	1207.	-103.	-1.	-85.	-79.
12	1.068	-.466	10885.	1761.	8631.	-4405.	2388.	166.	7283.	-1772.	-225.	-68.	60.	22.
13	1.652	.287	27855.	-2276.	-78.	-11986.	9815.	-45.	19916.	-1315.	-387.	-48.	116.	8.
14	2.255	.782	48468.	-8858.	-1457.	-18218.	8618.	4717.	86.	-2758.	-887.	-58.	318.	148.
SIGMA								2363.		1883.		60.		79.

HARMONIC COMPONENTS: HUB MOMENTS HUB SHEAR FORCES

N	T1C	T1S	M1C	L2C	M2C	L0C	Y2C	X0C	Y0C	Z0C
1	.525	-.425	-2188.	-5334.	1153.	2636.	82.	182.	-185.	36.
2	3.141	-1.058	6552.	16588.	-6562.	-1620.	175.	-778.	565.	-518.
3	1.633	-1.116	2336.	3353.	302.	346.	45.	-138.	8.	-18.
4	2.192	-1.966	6884.	7938.	318.	-657.	28.	-321.	168.	63.
5	1.395	-.871	-2058.	518.	837.	1086.	21.	57.	-21.	16.
6	1.789	-.861	-6318.	4388.	-174.	788.	36.	-188.	87.	-15.
7	2.282	-1.231	3578.	7736.	-1511.	-365.	36.	-388.	168.	-72.
8	1.483	-.515	320.	8764.	165.	357.	72.	-188.	38.	12.
9	1.684	-1.030	3027.	6178.	-165.	-826.	-14.	-181.	123.	88.
10	1.527	-2.570	5926.	31899.	1518.	-1868.	-135.	-388.	227.	372.
11	1.337	-.851	807.	3838.	885.	378.	92.	-88.	-18.	-4.
12	1.068	-.466	-10551.	9313.	5868.	1598.	207.	-11.	-22.	-52.
13	1.652	.287	-8177.	6458.	-1857.	2685.	586.	-6.	-81.	-128.
14	2.255	.782	-8178.	3284.	762.	3168.	553.	168.	-154.	-188.

Table I. (Continued)

TEST 13 LOCKED GYRO MODE

VKT = 82.76 RPM = 153.2 MU = 0.53 P = 1.53

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (MEAN COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
7901.86	36970.86	3.14	-419.31
4304.63	-12684.30	-21.48	130.88
11268.29	8044.16	-117.05	-65.53

N	T1C	T1S	Lsb	Msb	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	1.812	-1.255	2371.	4917.	4929.	7665.	1242.	-318.	3703.	-188.	110.	-1.	-102.	-1.
2	1.968	-1.129	4870.	3563.	6785.	5818.	4023.	373.	2567.	-352.	90.	-3.	-77.	13.
3	0.686	-0.431	7762.	25234.	15625.	26820.	4292.	-1702.	24519.	-284.	63.	25.	-315.	-13.
4	1.812	-1.028	6544.	7930.	10003.	9808.	5016.	899.	7097.	1381.	75.	-9.	-138.	-22.
5	1.811	-1.126	3953.	5590.	6977.	8338.	2618.	-389.	4376.	-565.	110.	14.	-121.	-11.
6	0.890	-0.820	3956.	18535.	9954.	21070.	1311.	-1187.	17406.	-1680.	101.	21.	-240.	10.
7	0.240	-0.480	8438.	31788.	17186.	32782.	4578.	1055.	31330.	1269.	40.	-14.	-350.	7.
8	1.950	-1.191	3750.	2780.	5521.	5296.	2967.	88.	1670.	-990.	101.	8.	-71.	17.
9	2.869	-1.796	-1326.	-11246.	-3147.	-7085.	-523.	-540.	-13072.	789.	166.	15.	73.	-1.
10	1.691	-0.927	6492.	10504.	10790.	12101.	4534.	-144.	8794.	1734.	64.	-11.	-172.	-33.
11	1.312	-2.313	-12497.	3141.	-10550.	9337.	-13347.	-836.	321.	-1401.	256.	10.	-78.	19.
12	1.186	-3.514	-24747.	-1302.	-23704.	8014.	-25191.	1397.	-5408.	925.	373.	-16.	-42.	-7.
13	1.925	-1.246	3843.	3789.	5624.	5856.	2968.	816.	2876.	349.	83.	-25.	-79.	8.
14	1.976	-0.277	13530.	7872.	16978.	8094.	12002.	-1283.	7769.	-1916.	9.	16.	-138.	6.
15	1.644	1.100	32149.	23909.	38927.	19386.	29142.	1770.	25887.	928.	-181.	-20.	-271.	6.
SIGMA								1081.		1125.		15.		14.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (3P COS COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
-8110.85	-9342.77	257.65	713.90
5373.68	3525.51	-200.52	-358.88
-120.08	-4898.75	-3.08	374.81

N	T1C	T1S	Lsb	Msb	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	1.812	-1.255	7681.	2345.	17078.	-837.	3535.	-242.	3746.	552.	-127.	-25.	-376.	26.
2	1.968	-1.129	9989.	2464.	23276.	-827.	4128.	-474.	3913.	784.	-132.	2.	-331.	-121.
3	.686	-.431	-4345.	-4898.	-12007.	-1075.	-968.	1408.	-6723.	-1911.	157.	35.	306.	-2.
4	1.812	-1.028	6217.	1430.	13118.	-925.	3172.	-578.	2487.	385.	-94.	8.	-276.	41.
5	1.811	-1.126	8044.	1885.	18845.	-179.	3279.	-477.	2793.	234.	-85.	20.	-432.	-79.
6	.890	-.820	-1412.	-247.	-3483.	1114.	-499.	730.	-847.	1363.	54.	-27.	83.	-7.
7	.240	-.480	-11253.	-2658.	-22584.	2398.	-6253.	-1490.	-4884.	1259.	202.	-9.	453.	5.
8	1.950	-1.191	10892.	2113.	24003.	-1166.	5108.	597.	3557.	192.	-131.	-1.	-524.	-98.
9	2.869	-1.796	19709.	6000.	42429.	-1164.	9685.	164.	9153.	-415.	-287.	26.	-908.	72.
10	1.691	-.927	4823.	-178.	9648.	-2770.	2694.	-396.	964.	-197.	-104.	-25.	-193.	43.
11	1.312	-2.313	10460.	7108.	29869.	6812.	1901.	682.	7234.	821.	-12.	-13.	-776.	-156.
12	1.186	-3.514	10151.	10844.	31646.	12342.	673.	-9.	10377.	-1872.	60.	29.	-880.	165.
13	1.925	-1.246	8729.	2313.	20043.	-1246.	3738.	-648.	3880.	351.	-142.	-18.	-453.	-14.
14	1.976	-.277	5916.	-2419.	7544.	-7030.	5195.	656.	-388.	636.	-184.	-47.	-85.	28.
15	1.644	1.100	-4359.	-11219.	-20301.	-11987.	2668.	75.	-10873.	-1941.	-31.	45.	638.	97.
SIGMA										1051.		26.		82.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (3P SIN COMPONENT)

~~ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)~~

d(Lh)	d(Mh)	d(Fx)	d(Fy)
7235.53	-8203.61	-282.12	709.65
-2150.15	4854.99	92.52	-507.25
5453.36	619.14	-153.34	-117.97

N	T1C	T1S	Lsb	Msb	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	1.812	-1.255	-2870.	2895.	-1056.	4884.	-3867.	-183.	2028.	209.	79.	1.	-73.	-11.
2	1.968	-1.129	-1573.	3491.	3615.	6110.	-3858.	-703.	2331.	-322.	105.	32.	-208.	-52.
3	.686	-.431	-3737.	-5842.	-21475.	-9458.	4081.	672.	-3957.	-816.	-153.	0.	710.	297.
4	1.812	-1.028	-1670.	2620.	-956.	3828.	-1984.	284.	2086.	129.	48.	5.	-29.	60.
5	1.811	-1.126	-2044.	2110.	-84.	4789.	-2908.	-108.	937.	-954.	106.	48.	-78.	-1.
6	.890	-.820	-2792.	-1902.	-10100.	-3132.	430.	-422.	-1359.	1031.	-49.	25.	292.	-62.
7	.240	-.480	-4522.	-6899.	-19927.	-11625.	2269.	-1631.	-4813.	522.	-189.	-5.	616.	-28.
8	1.950	-1.191	-647.	3159.	5630.	5732.	-3412.	38.	2023.	-503.	103.	22.	-251.	-112.
9	2.869	-1.796	-6433.	9929.	1997.	15970.	-10143.	-1418.	7261.	848.	242.	-17.	-337.	196.
10	1.691	-.927	1504.	905.	3823.	872.	481.	1937.	919.	-515.	-1.	-18.	-93.	-54.
11	1.312	-2.313	-11400.	373.	-18422.	6657.	-8299.	-100.	-2398.	-1132.	251.	57.	281.	-38.
12	1.186	-3.514	-18958.	1335.	-30911.	8475.	-13676.	799.	-1812.	811.	288.	-81.	678.	-45.
13	1.925	-1.246	-1133.	3112.	2335.	5463.	-2660.	1038.	2074.	-299.	94.	7.	-139.	-19.
14	1.976	-.277	4108.	3482.	12427.	1340.	448.	-1038.	4424.	1208.	-88.	-29.	-333.	-73.
15	1.644	1.100	14165.	-1399.	21987.	-10128.	10789.	1013.	2445.	-16.	-349.	-50.	-313.	-59.
SIGMA								873.		707.		35.		109.

Table I. (Continued)

TEST 13 CONTINUED

SWASHPLATE DERIVATIVES DUE TO CYCLIC ANGLES

DM1:d(0) DM2:d(TC) DM3:d(TS)

	(3P COS COMPONENT)		(3P SIN COMPONENT)	
	d(Lap)	d(Map)	d(Lap)	d(Map)
	111.68	-137.70	83.86	-89.47
	-77.19	89.00	-58.86	70.99
	33.99	-48.77	-42.18	51.19

N	T1C	T1S	Lap	B(Lap)	Map	B(Map)	Lap	B(Lap)	Map	B(Map)
1	1.012	-1.255	-79.	-8.	40.	-36.	8.	-3.	9.	19.
2	1.068	-1.129	-45.	-16.	42.	16.	-12.	-10.	5.	-3.
3	.686	-.631	-17.	-41.	-86.	6.	32.	9.	-64.	-20.
4	1.012	-1.028	-28.	36.	91.	33.	17.	15.	18.	13.
5	1.011	-1.126	-93.	16.	100.	35.	-8.	-18.	-9.	-8.
6	.898	-.820	-9.	-34.	5.	25.	11.	-84.	-66.	11.
7	.268	-.688	111.	34.	-68.	22.	54.	-11.	-109.	-31.
8	1.050	-1.191	-185.	-28.	58.	-23.	-31.	-32.	18.	8.
9	2.869	-3.798	-208.	-58.	287.	25.	-32.	-9.	-4.	-40.
10	1.691	-.927	-8.	45.	85.	12.	8.	-9.	3.	3.
11	1.312	-2.313	-88.	11.	48.	-22.	87.	-18.	-85.	19.
12	1.186	-3.514	-186.	-8.	154.	-12.	148.	45.	-166.	18.
13	1.825	-1.268	-32.	29.	87.	8.	-8.	-7.	-12.	-11.
14	1.878	-.277	-34.	17.	8.	-13.	-2.	37.	68.	11.
15	1.644	1.188	19.	-8.	-158.	-58.	-33.	35.	126.	18.
SIGMA				38.		26.		21.		18.

HARMONIC COMPONENTS:			HUB MOMENTS			HUB SHEAR FORCES				
N	T1C	T1S	M1C	L1C	M+C	L+C	Y1C	X+C	Y+C	X+C
1	1.012	-1.255	3707.	2780.	39.	755.	-227.	-180.	-140.	-27.
2	1.068	-1.129	3885.	3250.	27.	698.	-518.	-170.	-213.	38.
3	.686	-.631	-5402.	-2461.	-1321.	1495.	230.	633.	77.	-276.
4	1.012	-1.028	2225.	2629.	241.	563.	-142.	-61.	-116.	-33.
5	1.011	-1.126	2650.	2108.	-37.	1171.	-269.	-88.	-165.	-2.
6	.898	-.820	-838.	-929.	-208.	430.	68.	173.	17.	-119.
7	.268	-.688	-3577.	-5533.	-1308.	-720.	321.	409.	132.	-207.
8	1.050	-1.191	3484.	3568.	72.	1542.	-314.	-191.	-213.	68.
9	2.869	-3.798	9848.	8473.	-495.	1318.	-575.	-513.	-534.	95.
10	1.691	-.927	242.	1886.	725.	887.	-68.	-98.	-47.	-5.
11	1.312	-2.313	7768.	-248.	-532.	2149.	-514.	135.	-282.	-146.
12	1.186	-3.514	11926.	-570.	-1750.	1262.	-573.	269.	-287.	-209.
13	1.825	-1.268	3270.	2988.	618.	832.	-273.	-141.	-179.	-2.
14	1.878	-.277	-413.	4889.	27.	386.	10.	-259.	-75.	74.
15	1.644	1.188	-10791.	2557.	-82.	112.	495.	-172.	146.	141.

Table I. (Continued)

TEST 14 LOCKED GYRO MODE

VKT = 82.74 RPM = 180.2 MU = 0.81 P = 2.03

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (MEAN COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
10808.71	24687.57	-37.86	-273.68
578.87	-5767.83	1.42	37.31
6342.07	6345.78	-79.45	-37.98

N	T1C	T1S	Lab	Mab	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	1.373	-.931	6622.	13366.	10963.	14167.	4714.	-185.	15019.	781.	31.	-7.	-173.	-13.
2	.736	-.521	9612.	18768.	14495.	18808.	7654.	325.	18918.	-155.	22.	17.	-195.	18.
3	2.218	-1.284	5057.	7115.	7539.	8763.	3469.	690.	6384.	-98.	66.	0.	-98.	0.
4	2.888	-1.534	2388.	2497.	3833.	4888.	2799.	55.	3432.	-2368.	98.	7.	-59.	6.
5	3.226	-2.189	-1313.	-567.	-498.	2967.	-1651.	54.	-2148.	898.	147.	7.	-15.	-4.
6	1.536	-2.146	-1811.	7774.	950.	10719.	-3928.	-312.	8471.	-52.	118.	-17.	-110.	-6.
7	1.362	-2.951	-7098.	8798.	-6785.	11685.	-8192.	-298.	9869.	629.	195.	-1.	-92.	-7.
8	2.814	-1.188	4889.	3679.	6358.	5296.	4395.	-238.	2985.	-728.	65.	11.	-54.	17.
9	2.888	-1.888	5899.	4185.	7418.	5363.	5226.	447.	3683.	-215.	47.	-5.	-61.	11.
10	2.849	.469	15714.	10169.	14974.	8098.	14891.	-542.	11075.	748.	-85.	-12.	-148.	-18.
SIGMA								568.		841.		16.		11.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (3P COS COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
-1099.82	-33992.55	-504.35	709.18
6332.85	12717.89	12.84	-266.01
10548.48	-8936.68	-334.91	167.09

N	T1C	T1S	Lab	Mab	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	1.373	-.931	-7726.	-8755.	-12978.	-8288.	-5407.	-635.	-8959.	-741.	19.	-6.	218.	5.
2	.736	-.521	-8851.	-22948.	-24918.	-27439.	-5767.	-559.	-20940.	-985.	-188.	-65.	659.	22.
3	2.218	-1.284	-3805.	4985.	-1939.	7907.	-5185.	1675.	3579.	-1825.	129.	-27.	-95.	30.
4	2.888	-1.534	-4429.	15658.	2557.	22810.	-7584.	-1562.	12585.	-1223.	278.	26.	-270.	-51.
5	3.226	-2.189	-5947.	29136.	6563.	39718.	-10486.	-1118.	24455.	-1655.	429.	-29.	-412.	67.
6	1.536	-2.146	-16833.	12186.	-15452.	26128.	-17145.	-54.	8919.	2218.	678.	44.	-67.	-33.
7	1.362	-2.951	-25225.	18903.	-23239.	37321.	-28041.	118.	9811.	845.	761.	86.	-79.	6.
8	2.814	-1.188	4119.	12547.	9142.	12639.	1881.	2454.	12591.	920.	-5.	-107.	-295.	-1.
9	2.888	-1.888	1830.	13146.	6827.	14688.	-573.	-12.	12995.	1221.	58.	-35.	-299.	-5.
10	2.849	.469	15402.	-6898.	15211.	-11632.	15489.	-787.	-784.	1185.	-582.	125.	8.	-12.
SIGMA								1156.		1531.		56.		27.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (3P SIN COMPONEL..

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
39288.17	-5191.24	-971.31	44.06
-14892.88	6875.70	397.62	-72.55
10934.05	9087.67	-199.55	-197.45

N	T1C	T1S	Lab	Mab	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	1.373	-.931	8677.	-10005.	5716.	-17284.	9976.	1116.	-6826.	59.	-248.	-48.	118.	-10.
2	.736	-.521	22660.	-15004.	20864.	-26256.	23525.	849.	-7164.	-465.	-536.	45.	86.	-14.
3	2.218	-1.284	-6217.	-4341.	-9452.	-3686.	-6706.	2285.	-4891.	918.	59.	-209.	129.	-9.
4	2.888	-1.534	-18611.	-2102.	-22283.	8610.	-16981.	-16.	-6821.	-628.	628.	24.	147.	-11.
5	3.226	-2.189	-30578.	-581.	-34550.	17785.	-28898.	2368.	-9569.	167.	725.	-9.	151.	-78.
6	1.536	-2.146	-15980.	-16705.	-22158.	-15255.	-9071.	-2275.	-14614.	650.	32.	-29.	369.	7.
7	1.362	-2.951	-18457.	-22551.	-32178.	-17446.	-13119.	-562.	-24404.	552.	196.	49.	529.	5.
8	2.814	-1.188	-16519.	2896.	-19211.	13192.	-15312.	-1090.	-1628.	-196.	618.	42.	108.	58.
9	2.888	-1.888	-17217.	1154.	-20915.	10551.	-15578.	-1029.	-2898.	-1622.	367.	9.	148.	96.
10	2.849	.469	4893.	15141.	12264.	17518.	1851.	-822.	14179.	1248.	87.	19.	-296.	-59.
SIGMA								1931.		819.		48.		66.

Table I. (Continued)

TEST 34 CONTINUED

SWASHPLATE DERIVATIVES DUE TO CYCLIC ANGLES

HW1:d(0) HW2:d(TC) HW3:d(TS)

	(3P COS COMPONENT)		(3P SIN COMPONENT)	
	d(Lap)	d(Map)	d(Lap)	d(Map)
	93.47	-356.51	29.50	141.12
	-33.56	196.83	-34.36	-15.20
	62.01	-32.58	-32.47	117.54

B	T1C	T1S	Lap	D(Lap)	Map	D(Map)	B(Lap)	Map	B(Map)
1	1.373	-.931	-10.	1.	-89.	22.	4.	-48.	-51.
2	.736	-.921	13.	-25.	-306.	-82.	-28.	61.	12.
3	2.210	-1.264	-93.	7.	19.	-12.	-48.	-88.	-26.
4	2.668	-1.554	-85.	11.	95.	-13.	0.	-76.	0.
5	3.226	-2.109	-139.	-2.	159.	-59.	-16.	-173.	-16.
6	1.534	-2.146	-93.	60.	16.	82.	-14.	-110.	26.
7	1.342	-2.031	-161.	-8.	-19.	31.	87.	-207.	17.
8	2.014	-1.106	-101.	-31.	112.	-8.	-15.	-11.	21.
9	2.000	-1.000	-46.	-28.	116.	-2.	-15.	-48.	-18.
10	2.849	.669	98.	31.	137.	82.	81.	180.	37.
SIGMA				22.		69.	34.		28.

HARMONIC COMPONENTS:			HUB MOMENTS				HUB SHEAR FORCES			
B	T1C	T1S	M+C	L+C	M+C	L+C	Y+C	X+C	Y+C	X+C
1	1.373	-.931	-9867.	-6117.	589.	710.	249.	69.	-39.	-58.
2	.736	-.921	-22233.	-5485.	1292.	1698.	495.	-93.	-35.	-139.
3	2.210	-1.264	6188.	-6038.	-609.	853.	-42.	124.	8.	-6.
4	2.668	-1.554	16783.	-7163.	-2198.	-342.	-354.	212.	75.	66.
5	3.226	-2.109	26675.	-9426.	-2221.	-1066.	-569.	287.	136.	136.
6	1.534	-2.146	7092.	-18878.	-1079.	-264.	-43.	628.	-4.	57.
7	1.342	-2.031	11515.	-29290.	-1604.	-791.	-138.	845.	58.	116.
8	2.014	-1.106	15951.	127.	-1381.	1756.	-507.	52.	104.	-58.
9	2.000	-1.000	14035.	-1032.	-1542.	1259.	-285.	105.	84.	-45.
10	2.849	.669	-1207.	14829.	443.	656.	-40.	-288.	47.	-4.

Table I. (Continued)

TEST 15 LOCKED GYRO MODE

VKT = 82.68 RPM = 72.1 MU = 1.12 P = 2.64

*HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (MAIN COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
10224.12	24385.00	-82.81	-258.84
-26.55	-5196.47	18.64	48.39
5088.85	3647.82	-61.82	-38.66

N	T1C	T1S	Lsb	Msb	Llc	Mlc	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	2.503	-1.394	4244.	6836.	6523.	8024.	5244.	178.	6308.	78.	48.	2.	-93.	2.
2	2.042	-1.146	6343.	9961.	7500.	10447.	5020.	678.	9780.	191.	14.	-9.	-124.	-1.
3	1.563	-0.799	6692.	12392.	10199.	12C97.	5013.	-1151.	12259.	-1102.	12.	29.	-146.	14.
4	2.295	-1.525	5144.	8485.	8124.	9304.	5215.	1408.	8114.	1284.	93.	-17.	-121.	-22.
5	2.889	-1.967	1756.	3957.	3608.	5803.	936.	784.	3143.	1095.	74.	-19.	-74.	-18.
6	3.907	-2.960	-5635.	-5439.	-6475.	-1044.	-5281.	-4825.	-7325.	-4684.	178.	18.	38.	9.
7	2.630	-1.831	2194.	4732.	3464.	6400.	1321.	-537.	3894.	-711.	87.	5.	-73.	6.
8	2.108	-2.424	-1078.	1675.	948.	2963.	-1871.	272.	4888.	109.	25.	-17.	-88.	9.
9	1.817	-3.362	-6288.	4435.	-4607.	7503.	-7025.	-97.	2688.	145.	158.	3.	-67.	-1.
10	2.610	-1.127	4187.	5748.	6076.	6958.	5352.	-1069.	5203.	-1372.	48.	19.	-78.	20.
11	2.768	-0.251	7358.	7919.	12239.	8525.	7054.	-818.	9087.	11.	-16.	5.	-138.	-2.
12	2.832	0.823	10745.	12251.	20489.	9742.	15998.	784.	15397.	624.	-48.	-12.	-164.	-5.
SIGMA								784.		778.		12.		11.

*HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (3P COS COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
21222.20	-10536.89	-354.24	-258.03
-4517.45	5157.97	108.68	102.69
8528.79	4878.89	-68.78	129.62

N	T1C	T1S	Lsb	Msb	Llc	Mlc	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	2.503	-1.394	-1771.	-3672.	-3574.	-2715.	-375.	488.	-6091.	728.	38.	29.	79.	183.
2	2.042	-1.146	3529.	-5755.	1368.	-7584.	4480.	2265.	-6054.	671.	-65.	-11.	87.	181.
3	1.563	-0.799	7025.	-8778.	5242.	-12814.	8685.	1254.	-8454.	-2164.	-171.	9.	151.	257.
4	2.295	-1.525	2587.	-6813.	723.	-9583.	3651.	5592.	-6471.	1547.	-91.	-30.	79.	174.
5	2.889	-1.967	-7025.	-3516.	-8933.	-1575.	-6184.	2614.	-6569.	719.	78.	-17.	79.	119.
6	3.907	-2.960	-22504.	-2746.	-23754.	4039.	-21654.	-175.	-5790.	-1299.	273.	1.	57.	60.
7	2.630	-1.831	-6059.	-5155.	-8092.	-1253.	-5196.	1560.	-5691.	1115.	64.	6.	78.	119.
8	2.108	-2.424	-7253.	-10900.	-11214.	-7510.	-5214.	3749.	-11524.	-94.	60.	-1.	183.	412.
9	1.817	-3.362	-11559.	-16675.	18510.	-16757.	-24291.	-9184.	-17268.	61.	75.	-1.	-1208.	-805.
10	2.610	-1.127	-1870.	-2585.	-2239.	-1465.	-1405.	-1225.	-2788.	-199.	57.	30.	64.	22.
11	2.768	-0.251	4425.	1273.	5045.	357.	6149.	-2629.	1676.	-955.	-97.	8.	-25.	-184.
12	2.832	0.823	12101.	7292.	14975.	6423.	10827.	-4611.	8552.	531.	-115.	-11.	-115.	-424.
SIGMA								3800.		995.		16.		315.

*HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (3P SIN COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
12498.87	24851.76	-137.78	-386.79
-5938.19	-7615.50	72.16	114.99
-4098.83	6444.69	71.58	-109.69

N	T1C	T1S	Lsb	Msb	Llc	Mlc	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	2.503	-1.394	2573.	-4337.	1807.	-5839.	3261.	-88.	-7872.	-488.	-69.	-4.	65.	9.
2	2.042	-1.146	4356.	1991.	5565.	713.	3829.	-1249.	2553.	635.	-51.	21.	-48.	-22.
3	1.563	-0.799	8318.	5606.	10984.	3370.	7135.	686.	6584.	-1288.	-99.	-8.	-196.	14.
4	2.295	-1.525	4488.	424.	6929.	-1066.	4176.	-935.	1880.	3536.	-80.	21.	-21.	-65.
5	2.889	-1.967	1796.	-2745.	-2091.	-11732.	3468.	71.	-4883.	967.	-79.	-14.	152.	-9.
6	3.907	-2.960	-2808.	-25179.	-17638.	-26557.	1439.	98.	-26483.	-931.	-57.	8.	385.	8.
7	2.630	-1.831	1926.	-5504.	-470.	-8527.	4067.	-494.	-5608.	78.	-81.	-17.	98.	6.
8	2.108	-2.424	4778.	-7657.	5428.	-13407.	10172.	285.	-7719.	-483.	-158.	8.	147.	11.
9	1.817	-3.362	15709.	-19754.	26621.	-19774.	16040.	558.	-19978.	-930.	-159.	-9.	295.	14.
10	2.610	-1.127	302.	-5977.	-4867.	-5020.	1681.	78.	-5515.	-1274.	-42.	-12.	71.	34.
11	2.768	-0.251	-1687.	2328.	-879.	3455.	-2055.	881.	1850.	-325.	45.	1.	-32.	9.
12	2.832	0.823	-5955.	9906.	-2209.	13054.	-7892.	97.	8513.	-75.	124.	1.	-158.	2.
SIGMA								881.		1265.		11.		24.

Table I. (Continued)

TEST 13 CONTINUED

SWASHPLATE DERIVATIVES DUE TO CYCLIC ANGLES

M#1:d(0) M#2:d(TC) M#3:d(TS)

(3P COS COMPONENT)

d(Lap)	d(Map)
188.15	77.54
-78.85	-.23
16.80	75.56

(3P SIN COMPONENT)

d(Lap)	d(Map)
-82.97	283.69
-3.85	-88.88
-51.62	26.74

N	T1C	T1S	Lap	B(Lap)	Map	B(Map)	Lap	B(Lap)	Map	B(Map)
1	2.503	-1.394	-48.	-7.	-61.	-35.	-17.	3.	48.	-8.
2	2.062	-1.166	-37.	-30.	-11.	-2.	-20.	6.	95.	2.
3	1.563	-.790	-2.	-67.	-44.	-62.	-40.	2.	207.	53.
4	2.295	-1.525	-11.	12.	-38.	1.	-37.	-24.	88.	3.
5	2.889	-1.987	-48.	29.	-48.	22.	5.	-6.	-2.	-15.
6	1.907	-2.040	-200.	-38.	-178.	-28.	84.	11.	-66.	39.
7	2.838	-1.631	-57.	-8.	-56.	-8.	-24.	-15.	18.	-21.
8	2.105	-3.434	8.	36.	-66.	49.	51.	17.	67.	-9.
9	1.817	-5.362	2.	15.	-139.	37.	90.	8.	66.	-9.
10	2.810	-1.127	-26.	18.	-21.	-15.	-62.	-20.	22.	-31.
11	2.768	-.251	-32.	9.	60.	-18.	-71.	10.	58.	-8.
12	2.832	.823	-14.	17.	209.	84.	-136.	12.	87.	1.
SIGMA				25.		54.		14.		33.

HARMONIC COMPONENTS:

N	T1C	T1S	MJC	LJC	MoC	LoC	YJC	XJC	YoC	XoC
			HUB MOMENTS				HUB SHEAR FORCES			
1	2.503	-1.394	-3676.	-2324.	-415.	1348.	66.	50.	8.	-12.
2	2.062	-1.166	-4627.	3516.	-807.	963.	69.	-57.	18.	-8.
3	1.563	-0.790	-7785.	7632.	-649.	1052.	120.	-114.	31.	-8.
4	2.295	-1.525	-4321.	2266.	-147.	1185.	69.	-26.	3.	-5.
5	2.889	-1.987	-3918.	-7531.	-451.	1362.	78.	135.	-1.	-17.
6	1.907	-2.040	-3615.	-23070.	-2177.	1417.	57.	529.	0.	-56.
7	2.838	-1.631	-3579.	-4402.	-312.	1206.	78.	74.	-2.	-25.
8	2.108	-3.424	-10761.	-6460.	-560.	1259.	171.	86.	13.	-46.
9	1.817	-5.362	-16455.	-17888.	-615.	-6913.	-477.	130.	-726.	-66.
10	2.810	-1.127	-2235.	-2458.	-554.	1057.	42.	54.	0.	-17.
11	2.768	-0.251	1854.	2489.	-179.	1180.	-35.	-34.	18.	-5.
12	2.832	0.823	8377.	9670.	475.	1157.	-120.	-132.	5.	18.

Table I. (Continued)

TEST 16 LOCKED GYRO MODE

VKT = 82.68 RPM = 38.0 MU = 2.13 P = 6.67

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (TOTAL COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
8790.88	17704.15	-28.98	-298.29
271.59	-1982.88	-4.68	23.57
3373.49	2189.66	-36.80	-19.86

N	T1C	T1S	Lsh	Msh	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	3.862	-2.227	5013.	5962.	4691.	6934.	2269.	-58.	5428.	102.	39.	4.	-87.	-1.
2	3.013	-1.281	6377.	7291.	3932.	8273.	5088.	-210.	9293.	204.	-1.	-5.	-117.	-13.
3	2.589	-0.891	8376.	11163.	11678.	10771.	6918.	429.	11339.	586.	-16.	-7.	-132.	-18.
4	1.981	-0.379	9848.	12268.	12474.	11953.	7545.	-457.	12579.	-646.	-12.	15.	-135.	11.
5	3.276	-1.659	7014.	9841.	9483.	8934.	5925.	1848.	9156.	1379.	-6.	-25.	-98.	-7.
6	4.317	-2.761	787.	3751.	1747.	5183.	226.	-490.	3118.	-331.	57.	6.	-46.	1.
7	3.271	-1.596	4710.	7549.	6843.	7955.	3767.	-527.	7437.	-678.	14.	-4.	-85.	7.
8	2.867	-2.675	281.	6457.	2111.	8184.	-526.	-1068.	5692.	-981.	89.	15.	-73.	7.
9	2.673	-3.758	-1751.	5498.	-105.	8156.	-2644.	714.	4258.	557.	93.	-4.	-65.	-2.
10	4.161	-1.339	5525.	6243.	7276.	6498.	4751.	-654.	5150.	-685.	19.	9.	-70.	7.
11	4.822	-0.778	8787.	8524.	10549.	5848.	7985.	680.	6809.	193.	-26.	-5.	-72.	8.

SIGMA 778. 615. 16. 7.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (3P COS COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
9879.33	-3679.52	-82.13	52.87
-2641.28	931.33	28.09	-16.59
1320.23	4066.06	-10.93	-35.56

N	T1C	T1S	Lsh	Msh	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	3.862	-2.227	-5036.	-7375.	-6716.	-6120.	-4257.	-990.	-7929.	1210.	59.	-4.	79.	-8.
2	3.013	-1.281	-847.	-6594.	-2538.	-5634.	-275.	-500.	-6292.	-522.	27.	8.	56.	3.
3	2.589	-0.891	830.	-6660.	-437.	-6451.	1320.	-539.	-6757.	-1866.	9.	6.	63.	18.
4	1.981	-0.379	4321.	-2679.	3657.	-3398.	4611.	469.	-2504.	1018.	-44.	-8.	27.	-8.
5	3.276	-1.659	-1960.	-6529.	-3271.	-5561.	-1361.	-393.	-7467.	426.	39.	8.	53.	-11.
6	4.317	-2.761	-5825.	-10639.	-7967.	-8521.	-4886.	261.	-11277.	-479.	77.	4.	85.	-4.
7	3.271	-1.596	-871.	-6178.	-2115.	-5549.	-922.	553.	-7451.	872.	25.	-5.	58.	-12.
8	2.867	-2.675	-2130.	-11972.	-6861.	-10546.	-425.	255.	-11674.	228.	33.	3.	109.	-2.
9	2.673	-3.758	-3899.	-16587.	-8819.	-15473.	-2045.	102.	-16479.	-508.	53.	-5.	107.	10.
10	4.161	-1.339	-2376.	-4554.	-3618.	-3118.	-1947.	903.	-4848.	593.	69.	-4.	61.	4.
11	4.822	-0.778	-4157.	-2183.	-4820.	-584.	-4038.	-160.	-2860.	-547.	83.	-1.	11.	7.

SIGMA 544. 864. 6. 9.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (3P SIN COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
-1046.20	11584.92	61.99	-155.99
-796.87	-3503.36	-8.29	36.72
-1966.56	2735.25	36.45	-30.79

N	T1C	T1S	Lsh	Msh	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	3.862	-2.227	-2446.	-4371.	-4217.	-3304.	-1674.	149.	-4378.	871.	5.	19.	71.	17.
2	3.013	-1.281	-3112.	819.	-2889.	1257.	-3208.	-291.	825.	270.	18.	1.	-9.	-4.
3	2.589	-0.891	-3430.	5077.	-2794.	4219.	-3713.	-386.	5597.	-155.	67.	18.	-26.	8.
4	1.981	-0.379	-3614.	7278.	-1511.	6440.	-4253.	-345.	6761.	271.	45.	-1.	-76.	-3.
5	3.276	-1.659	-2774.	653.	-2574.	877.	-2776.	-325.	554.	2178.	9.	6.	-6.	-24.
6	4.317	-2.761	-2599.	-8760.	-5363.	-7008.	-1869.	-684.	-8926.	-994.	-22.	19.	97.	5.
7	3.271	-1.596	-1769.	-3126.	-2529.	-3633.	-1256.	1319.	-3277.	-1812.	-4.	-19.	35.	19.
8	2.867	-2.675	154.	-6637.	-1079.	-5754.	685.	827.	-6856.	-977.	-59.	-21.	69.	8.
9	2.673	-3.758	999.	-5806.	-819.	-7590.	1698.	-419.	-6818.	601.	-71.	-2.	69.	-10.
10	4.161	-1.339	-4163.	-4855.	-5082.	-4277.	-3753.	27.	-4898.	-994.	3.	-11.	37.	-8.
11	4.822	-0.778	-5775.	-6862.	-6578.	-5679.	-5418.	-8.	-6516.	586.	29.	-10.	32.	-7.

SIGMA 968. 1499. 12. 11.

Table I. (Continued)

TEST 16 CONTINUED

SWASHPLATE DERIVATIVES DUE TO CYCLIC ANGLES

RM1:d(0) RM2:d(TC) RM3:d(TS)

(3P COS COMPONENT)

d(Lap)	d(Map)
-173.67	370.87
65.59	70.26
-222.54	74.67

(3P SIN COMPONENT)

d(Lap)	d(Map)
25.87	494.59
82.61	-147.44
20.99	201.80

N	TSC	TSS	Lap	D(Lap)	Map	D(Map)	Lap	D(Lap)	Map	D(Map)
1	3.882	-2.227	427.	-70.	231.	-270.	20.	-270.	-469.	55.
2	3.013	-1.281	147.	-101.	810.	110.	309.	83.	-48.	122.
3	2.589	-.891	109.	-99.	818.	23.	196.	-94.	-19.	51.
4	1.981	-.379	49.	48.	336.	-147.	93.	-88.	82.	-85.
5	1.376	-1.859	388.	15.	877.	41.	289.	30.	-346.	-23.
6	4.917	-2.741	636.	-3.	451.	-28.	305.	-18.	-496.	-1.
7	3.271	-1.596	356.	26.	618.	127.	361.	180.	-348.	-38.
8	2.867	-2.075	885.	34.	456.	76.	289.	88.	-486.	-18.
9	2.673	-3.758	806.	20.	281.	-8.	186.	19.	-879.	-20.
10	4.161	-1.339	383.	67.	885.	32.	413.	76.	-433.	-66.
11	4.822	-.778	262.	29.	870.	13.	438.	33.	-590.	-10.
SIGMA				47.		116.		102.		53.

HARMONIC COMPONENTS:

			HUB MOMENTS				HUB SHEAR FORCES			
N	TSC	TSS	MJC	LSC	MSC	LOC	YJC	XSC	YSC	XOC
1	3.882	-2.227	-9159.	-6327.	-6796.	70.	54.	61.	57.	-19.
2	3.013	-1.281	-1647.	175.	-6905.	-459.	19.	9.	57.	18.
3	2.589	-0.891	-1525.	1966.	-5235.	-626.	6.	-9.	56.	17.
4	1.981	-0.379	668.	5686.	-3595.	-1075.	-19.	-52.	57.	34.
5	1.376	-1.859	-2088.	-606.	-6862.	-957.	22.	17.	51.	22.
6	4.917	-2.741	-6700.	-6706.	-6564.	1820.	53.	87.	53.	-18.
7	3.271	-1.596	-2598.	-3899.	-5854.	1477.	27.	38.	25.	-5.
8	2.867	-2.075	-6184.	-2590.	-5491.	1468.	81.	61.	28.	-9.
9	2.673	-3.758	-9339.	-3431.	-7640.	1586.	119.	68.	47.	-17.
10	4.161	-1.339	-575.	-3414.	-4323.	1473.	19.	45.	22.	6.
11	4.822	-0.778	1274.	-6177.	-4139.	139.	-6.	68.	17.	16.

Table I. (Continued)

TEST 17 FREE GYRO MODE

VKT = 81.67 RPM = 187.2 MU = 0.40 P = 1.35

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (HUB COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
8269.26	40396.24	86.70	-245.87
8360.76	-15965.57	-47.93	139.91
16429.69	11185.92	-156.48	22.20

N	T1C	T1S	Lah	Mah	Lic	Mic	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	1.606	-1.201	1708.	1516.	4088.	6235.	658.	-1301.	-598.	-1859.	168.	-19.	-95.	-67.
2	0.461	-1.198	-7280.	22184.	-200.	29660.	-10775.	-2852.	18895.	-408.	305.	85.	-285.	-75.
3	0.177	-1.399	-14177.	27534.	-1693.	35877.	-13509.	-675.	23868.	1954.	334.	36.	-339.	-87.
4	1.673	-1.042	1842.	1439.	6465.	6059.	2684.	-2454.	-412.	-2939.	185.	19.	-196.	-70.
5	3.588	-0.885	20158.	-24644.	18686.	-21896.	20791.	-2886.	-29866.	818.	119.	39.	59.	-177.
6	1.570	-1.195	2580.	2412.	5740.	6828.	1156.	-698.	555.	-1697.	178.	-19.	-127.	-75.
7	2.086	-2.453	-13679.	-11004.	-15976.	-4891.	-12913.	1674.	-13128.	9291.	179.	-4.	73.	79.
8	1.975	-3.248	-26178.	-21996.	-28046.	-6978.	-25378.	3235.	-26492.	1053.	445.	-19.	75.	114.
9	1.673	-1.128	5846.	1694.	5939.	5748.	7925.	-756.	-179.	-1269.	184.	-22.	-82.	-45.
10	1.648	-0.107	19999.	12845.	2817.	13201.	26813.	6519.	12421.	-457.	21.	-6.	679.	693.
11	1.424	0.312	30310.	26588.	37333.	23138.	27196.	1847.	25211.	4086.	-58.	-11.	-281.	-261.
12	1.762	-1.169	3027.	-637.	5633.	3656.	1865.	-1818.	-7677.	-1879.	178.	-19.	-68.	-71.

SIGMA 2709. 1926. 28. 926.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (3P COS COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
-5082.11	-1516.92	436.61	-519.65
6943.96	-1671.91	-325.11	274.62
-1620.29	-1882.59	5.28	-159.68

N	T1C	T1S	Lah	Mah	Lic	Mic	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	1.606	-1.201	6815.	277.	1326.	-1799.	5196.	392.	1197.	604.	-69.	2.	197.	-6.
2	0.461	-1.198	2975.	1954.	4422.	10222.	1331.	1739.	1259.	-1228.	259.	-94.	-46.	149.
3	0.177	-1.399	151.	3149.	4561.	10862.	-1021.	116.	1429.	-259.	279.	55.	-177.	76.
4	1.673	-1.042	3038.	-830.	-1270.	-2647.	4971.	92.	39.	-11.	-41.	26.	176.	69.
5	3.588	-0.885	7351.	-12052.	-7666.	-25971.	14898.	857.	-4359.	-1015.	-778.	19.	642.	76.
6	1.570	-1.195	3961.	-842.	1723.	-3930.	4918.	501.	564.	-251.	-126.	-50.	87.	-14.
7	2.086	-2.453	6256.	1447.	-13571.	-4465.	12105.	2901.	4259.	-991.	-197.	19.	715.	241.
8	1.975	-3.248	6159.	6749.	530.	1200.	5857.	-4280.	9199.	998.	-291.	-7.	156.	-367.
9	1.673	-1.128	5782.	-369.	1186.	-3719.	4925.	-95.	1116.	719.	-135.	-28.	106.	-15.
10	1.648	-0.107	2854.	-2693.	817.	-5766.	3750.	515.	-1324.	2201.	-129.	-19.	81.	129.
11	1.424	0.312	3619.	-5611.	10267.	-5511.	-2216.	-5827.	-5651.	-231.	6.	29.	-593.	-367.
12	1.762	-1.169	4303.	-757.	-525.	-3788.	6340.	819.	576.	169.	-121.	16.	185.	58.

SIGMA 1921. 963. 29. 181.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (3P SIN COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
9597.38	-9258.24	-592.66	345.90
-2996.01	5511.69	122.34	-128.59
6871.88	-3686.59	-519.21	228.32

N	T1C	T1S	Lah	Mah	Lic	Mic	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	1.606	-1.201	24.	5014.	5114.	6759.	-2218.	-1355.	4268.	725.	89.	27.	-296.	-69.
2	0.461	-1.198	2474.	-3554.	774.	-9189.	5006.	636.	-1542.	799.	-219.	-59.	82.	59.
3	0.177	-1.399	2524.	-5276.	515.	-11525.	5256.	958.	-4846.	517.	-269.	-739.	79.	71.
4	1.673	-1.042	128.	3946.	2741.	1948.	-1046.	-556.	1961.	136.	0.	55.	-197.	1.
5	3.588	-0.885	-1796.	16987.	4080.	14998.	-4947.	1377.	16477.	1217.	0.	-199.	-295.	89.
6	1.570	-1.195	-171.	6149.	6141.	9215.	-2089.	-1165.	6884.	1284.	116.	139.	-174.	-65.
7	2.086	-2.453	-2296.	12678.	2229.	20813.	-6709.	1690.	8794.	-7949.	536.	-719.	-679.	89.
8	1.975	-3.248	-4874.	22178.	13032.	39896.	-12761.	-620.	14357.	756.	709.	25.	-716.	-87.
9	1.673	-1.128	-211.	6369.	2879.	6225.	-1968.	-682.	3576.	-557.	76.	102.	-129.	5.
10	1.648	-0.107	1361.	-741.	1184.	-5817.	1482.	-2977.	619.	578.	-129.	296.	8.	-101.
11	1.424	0.312	6465.	-12326.	-58.	-31058.	9356.	2482.	-6075.	-1597.	-767.	-791.	281.	27.
12	1.762	-1.169	597.	6339.	6426.	6692.	-1579.	-8.	6172.	-587.	16.	19.	-161.	-16.

SIGMA 1365. 1084. 127. 98.

Table I. (Continued)

[illegible] 37 . [illegible]

SWASHPLATE DERIVATIVES DUE TO CYCLIC ANGLES

RM1:d(0) RM2:d(TC) RM3:d(TS)

(3P COS COMPONENT) (3P SIN COMPONENT)

	d(Lap)	d(Map)		d(Lap)	d(Map)
	48.81	31.22		49.34	64.75
	-2.80	14.65		-42.42	-26.82
	36.29	18.46		8.13	19.88

N	T1C	T1S	Lap	D(Lap)	Map	D(Map)	Lap	D(Lap)	Map	D(Map)
1	1.606	-1.201	-57.	-33.	4.	-29.	28.	53.	29.	65.
2	.661	-1.198	-9.	12.	3.	-7.	69.	18.	34.	60.
3	.177	-1.399	-38.	-8.	-18.	-26.	-19.	-52.	-8.	0.
4	1.673	-1.042	-14.	1.	15.	-22.	-48.	-18.	-36.	1.
5	3.588	-.885	-2.	18.	68.	2.	-141.	-31.	-58.	24.
6	1.578	-1.295	91.	114.	352.	320.	-108.	-82.	-149.	-110.
7	2.088	-2.655	-82.	14.	4.	-12.	-74.	-18.	-1.1.	-31.
8	1.975	-5.248	-169.	-28.	-49.	-49.	1.	58.	-339.	7.
9	1.673	-1.128	-36.	-14.	2.	-33.	-47.	-17.	-36.	-3.
10	1.548	-.107	-15.	-54.	-44.	-35.	6.	26.	-8.	-23.
11	1.624	.312	75.	11.	51.	-6.	57.	66.	36.	-8.
12	1.782	-1.168	-48.	-25.	-5.	-40.	-22.	12.	2.	41.
SIGMA				48.		186.		93.		63.

HARMONIC COMPONENTS: HUB MOMENTS HUB SHEAR FORCES

N	T1C	T1S	MXC	LIC	MMC	LOC	YJC	XJC	YOC	XHC
1	1.606	-1.201	1795.	4720.	-511.	474.	19.	-193.	88.	68.
2	0.661	-1.198	-886.	-251.	2119.	1271.	60.	158.	-154.	56.
3	0.177	-1.399	107.	-2215.	5315.	592.	32.	252.	-214.	-177.
4	1.673	-1.042	553.	4454.	-493.	515.	27.	-94.	87.	13.
5	3.588	-0.885	4.	14930.	-6364.	-42.	341.	-467.	141.	-233.
6	1.578	-1.295	1327.	6500.	-762.	26.	-14.	-149.	101.	25.
7	2.088	-2.655	5487.	13444.	-1429.	1661.	190.	-328.	525.	92.
8	1.975	-5.248	10975.	10107.	-1786.	-4259.	-277.	-464.	432.	267.
9	1.673	-1.128	1342.	4744.	-226.	660.	15.	-134.	84.	-8.
10	1.548	-0.107	-1447.	2189.	79.	1567.	107.	-57.	-21.	-68.
11	1.624	0.312	-749.	-3151.	1842.	914.	108.	132.	-741.	-129.
12	1.782	-1.168	977.	5254.	-402.	1084.	85.	-141.	100.	28.

Table I. (Continued)

TEST 14 FREE GYRO MODE

VET = 81.26 RPM = 154.6 MU = 0.52 P = 1.53

[illegible] MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (HELP COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
7749.06	34268.87	61.79	-375.62
[illegible]	[illegible]	-88.48	36.22
10644.65	7268.09	-108.09	-58.67

N	T1C	T1S	Lab	Mab	Lic	Mic	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	1.917	-1.377	2824.	3479.	5380.	7420.	1705.	435.	1727.	-719.	159.	-8.	-191.	5.
2	0.490	-1.397	-3487.	20069.	2059.	26022.	-6640.	-1606.	17607.	-1116.	261.	47.	-261.	2.
3	-0.005	-1.306	-4341.	27327.	3109.	33167.	-7621.	-1454.	24745.	-57.	255.	32.	-298.	-2.
4	1.888	-1.592	2171.	5036.	4581.	8888.	1194.	2254.	5335.	2125.	154.	-52.	-46.	0.
5	3.130	-1.078	10676.	-6671.	11199.	-4233.	10151.	526.	-7455.	1736.	90.	-12.	-29.	-21.
6	0.471	-0.500	17216.	-15370.	15998.	-13745.	17206.	-1555.	-15982.	-1444.	61.	41.	53.	14.
7	1.904	-1.498	2265.	3521.	4736.	7448.	1078.	1169.	1078.	186.	159.	-11.	-192.	-2.
8	3.665	-0.762	15892.	-19216.	11935.	-8114.	13352.	-1669.	-11119.	-496.	84.	99.	6.	4.
9	1.910	-1.583	736.	4932.	4459.	9199.	-813.	335.	3078.	2957.	164.	-18.	-141.	-45.
10	1.952	-2.710	-12215.	-4761.	-11757.	1951.	-12636.	526.	-6886.	-358.	276.	-29.	-14.	5.
11	1.918	-3.399	-21774.	-9725.	-22618.	88.	-21550.	-1185.	-14749.	-1926.	345.	17.	34.	22.
12	1.915	-1.685	482.	3275.	2589.	7767.	-674.	1546.	1296.	1049.	187.	-15.	-79.	9.
13	1.891	0.068	19923.	13536.	24318.	13552.	18678.	140.	13517.	277.	1.	-9.	-219.	-16.
14	1.451	0.959	27556.	22982.	34232.	20642.	24585.	518.	23971.	-778.	-98.	-24.	-268.	25.
SIGMA								1209.		1961.		25.		17.

MU MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (SP COS COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
-3565.80	-8169.97	171.60	717.60
6331.37	3108.65	-196.54	-314.55
264.33	-6101.31	-19.08	572.38

N	T1C	T1S	Lab	Mab	Lic	Mic	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	1.917	-1.377	8969.	880.	20413.	-1927.	3921.	-471.	2115.	-536.	-112.	-14.	-458.	-68.
2	0.490	-1.397	-45.	-504.	3302.	2814.	-1517.	276.	-1967.	-70.	139.	16.	-134.	-177.
3	-0.005	-1.306	-6173.	-1505.	-11348.	3410.	-5885.	22.	-1879.	133.	147.	-9.	398.	-24.
4	1.888	-1.592	6327.	2096.	13138.	-1190.	9296.	-466.	3535.	598.	-191.	-47.	-276.	149.
5	3.130	-1.078	28954.	-253.	29292.	-6818.	30199.	611.	2286.	-9219.	-987.	25.	-539.	197.
6	0.471	-0.500	22369.	1237.	41787.	-10361.	13705.	245.	6367.	1119.	-478.	-11.	-777.	-68.
7	1.904	-1.498	9544.	1319.	22618.	-604.	3788.	-526.	2157.	-782.	-77.	18.	-599.	-89.
8	3.665	-0.762	20188.	1366.	41681.	-6518.	31088.	-92.	6887.	212.	-916.	97.	-844.	-241.
9	1.910	-1.583	7705.	1302.	15759.	280.	6179.	-149.	1759.	-1937.	-41.	59.	-399.	153.
10	1.952	-2.710	14811.	2293.	38459.	6815.	6200.	-94.	8761.	712.	-75.	14.	-959.	-49.
11	1.918	-3.399	17758.	7849.	45735.	7952.	5467.	1629.	10687.	-4.	-77.	-18.	-1118.	28.
12	1.915	-1.685	9307.	4064.	20265.	1053.	5061.	-1256.	5397.	1659.	-197.	-99.	-479.	76.
13	1.891	0.068	2593.	-3174.	-2619.	-7849.	4670.	8.	-2399.	1294.	-167.	-27.	197.	69.
14	1.451	0.959	-3466.	-9791.	-20782.	-11314.	1849.	936.	-9216.	-479.	-91.	7.	691.	57.
SIGMA								699.		1916.		27.		112.

MU MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (SP SIN COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
9739.05	-6538.67	-317.35	816.89
-3247.12	4032.36	88.15	-436.27
5961.75	836.62	-162.92	-36.50

N	T1C	T1S	Lab	Mab	Lic	Mic	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	1.917	-1.377	-650.	2959.	4759.	4462.	-1093.	1632.	2268.	229.	71.	-7.	-218.	-47.
2	0.490	-1.397	-5998.	-6955.	-22188.	-5404.	695.	252.	-4756.	-1097.	-18.	51.	695.	141.
3	-0.005	-1.306	-7067.	-7218.	-27992.	-4896.	1740.	-198.	-6094.	-993.	-197.	26.	892.	196.
4	1.888	-1.592	-5379.	2240.	-5695.	5059.	-5316.	537.	1800.	-765.	112.	17.	5.	153.
5	3.130	-1.078	-169.	8227.	3790.	10542.	-4509.	2524.	7180.	-5.	95.	-69.	-398.	315.
6	3.973	-0.500	8995.	29519.	35782.	16796.	-6903.	-859.	18627.	-629.	191.	97.	-3197.	-48.
7	1.904	-1.498	-2652.	2158.	-1172.	4726.	-3592.	2067.	992.	-998.	104.	29.	-57.	108.
8	5.665	-0.762	1527.	10477.	19186.	14887.	-6252.	-197.	8589.	-159.	189.	54.	-798.	154.
9	1.910	-1.583	-2867.	1768.	-770.	2962.	-2699.	5262.	1212.	-932.	69.	-68.	-53.	198.
10	1.952	-2.710	-11847.	6695.	16313.	11276.	-24920.	-11819.	1797.	725.	285.	1.	-1128.	-992.
11	1.919	-3.399	-16294.	9214.	-17951.	12729.	-12598.	4017.	1909.	1567.	391.	-56.	169.	241.
12	1.915	-1.685	-5328.	1200.	-5454.	6363.	-5269.	1215.	1404.	92.	127.	19.	5.	141.
13	1.891	0.068	7079.	2297.	18179.	-601.	2871.	-1099.	1368.	206.	-196.	17.	-567.	-157.
14	1.451	0.959	12340.	-882.	20003.	-10797.	9813.	-1779.	1795.	1792.	-802.	-79.	-595.	-262.
SIGMA								3689.		817.		62.		115.

Table I. (Continued)

TEST 18 CONTINUED

SWASHPLATE DERIVATIVES DUE TO CYCLIC ANGLES

RM1:d(B) RM2:d(TC) RM3:d(TS)

	(1P COS COMPONENT)		(1P SIN COMPONENT)	
	d(Lap)	d(Map)	d(Lap)	d(Map)
	58.04	0.71	-55.26	45.63
	-42.58	21.62	16.28	-16.20
	8.33	19.24	-39.79	42.57

N	T1C	T1S	Lap	D(Lap)	Map	D(Map)	Lap	D(Lap)	Map	D(Map)
1	1.917	-1.377	-75.	-48.	15.	-15.	77.	32.	-8.	15.
2	.490	-1.397	48.	15.	6.	0.	43.	19.	-24.	-5.
3	-.003	-1.306	28.	-21.	-18.	-6.	-38.	-58.	-48.	-30.
4	1.888	-1.592	-20.	15.	34.	7.	28.	-24.	-37.	4.
5	1.130	-1.078	-27.	57.	89.	28.	17.	-54.	-17.	19.
6	1.971	-.500	-149.	-35.	73.	-8.	59.	-19.	-48.	-32.
7	1.984	-1.498	-58.	-19.	22.	-6.	52.	3.	-39.	-1.
8	1.445	-.742	-85.	0.	60.	-12.	66.	12.	-24.	-3.
9	1.910	-1.583	-33.	3.	43.	15.	38.	-16.	-38.	12.
10	1.952	-2.710	-25.	25.	20.	8.	138.	58.	-95.	15.
11	1.910	-3.391	-68.	-16.	-28.	-30.	127.	15.	-140.	-22.
12	1.913	-1.685	-38.	0.	55.	29.	46.	-18.	-27.	18.
13	1.891	.068	-26.	-8.	33.	-17.	-21.	-16.	-7.	-37.
14	1.431	.959	17.	12.	52.	-2.	2.	65.	101.	23.
SIGMA				25.		16.		27.		22.

HARMONIC COMPONENTS: HUB MOMENTS HUB SHEAR FORCES

N	T1C	T1S	MXC	LXC	MyC	LyC	YZC	XZC	YyC	XyC
1	1.917	-1.377	2576.	3993.	-459.	827.	-259.	-164.	-198.	92.
2	0.490	-1.397	-1191.	-3135.	-635.	1619.	-58.	384.	-76.	-951.
3	-0.003	-1.306	-2730.	-4959.	-940.	1074.	157.	439.	50.	-395.
4	1.888	-1.592	4424.	2132.	-290.	1112.	-193.	-63.	-41.	-48.
5	1.130	-1.078	3648.	8659.	-862.	1478.	-313.	-933.	-218.	64.
6	1.971	-0.500	6686.	12194.	-517.	1569.	-474.	-825.	-199.	561.
7	1.984	-1.498	2730.	2386.	-573.	1348.	-313.	-68.	-209.	-9.
8	1.445	-0.742	5530.	9736.	-722.	1355.	-512.	-510.	-551.	196.
9	1.910	-1.583	2180.	2691.	-428.	1479.	-184.	-48.	-136.	5.
10	1.952	-2.710	16530.	2949.	-7790.	1152.	-608.	-597.	-145.	532.
11	1.910	-3.391	11662.	3692.	-954.	1780.	-709.	38.	-409.	-122.
12	1.913	-1.685	5339.	2423.	64.	819.	-592.	-58.	-175.	-65.
13	1.891	0.068	-2656.	6004.	329.	661.	150.	-258.	66.	199.
14	1.431	0.959	-8065.	3804.	-58.	58.	562.	-283.	180.	122.

Table I. (Continued)

TEST 19 LOCKED GYRO MODE

VET = 89.80 RPM = 177.7 MU = 0.05 P = 1.41

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (MEAN COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
-261.67	47990.15	-7.17	-875.01
6733.60	-17082.09	-15.75	221.55
10759.65	30772.20	-188.02	-705.25

N	T1C	T1S	Lab	Mab	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	1.000	-1.236	770.	4582.	5564.	9550.	-1343.	-626.	2398.	151.	199.	1.	-192.	9.
2	1.513	-1.402	-3655.	8802.	1854.	14593.	-6080.	-980.	6282.	-740.	230.	-4.	-220.	32.
3	.362	-.691	2578.	36889.	14961.	60528.	-4401.	324.	35282.	899.	168.	29.	-670.	-26.
4	1.974	-1.854	-1648.	2888.	2803.	7984.	-3517.	1185.	641.	4709.	204.	-71.	-170.	-72.
5	3.283	-1.918	-2252.	-23885.	-8805.	-14735.	588.	-42.	-26750.	388.	534.	27.	256.	34.
6	3.571	-1.865	1389.	-28453.	-5895.	-21295.	4112.	296.	-31849.	1261.	248.	2.	255.	-65.
7	2.220	-1.184	2490.	-2224.	5399.	2626.	1208.	-805.	-4415.	-1735.	190.	7.	-116.	24.
8	2.620	-2.000	-7670.	-14192.	-9756.	-6842.	-6467.	-461.	-18781.	-5245.	372.	58.	91.	18.
9	2.189	-1.304	5356.	-987.	6451.	5390.	1999.	1488.	-2805.	645.	172.	-54.	-123.	-1.
10	1.722	-.885	6661.	8687.	11080.	12543.	1548.	756.	6954.	-1021.	155.	2.	-202.	89.
11	1.868	-.317	12344.	11565.	21473.	12442.	8095.	-819.	12168.	-1826.	35.	9.	-385.	13.
12	2.000	.199	20098.	16148.	33203.	16284.	15484.	193.	16998.	1027.	-78.	-6.	-488.	-18.
SIGMA								816.		1821.		28.		32.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (SP COS COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
-9250.83	-5397.74	772.90	-581.75
9222.66	-864.32	-455.48	548.04
-531.99	-7116.02	267.54	-7.10

N	T1C	T1S	Lab	Mab	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	1.000	-1.236	2371.	-1285.	-12619.	-8893.	8887.	224.	2068.	312.	-146.	93.	592.	125.
2	1.513	-1.402	2480.	-78.	-7133.	-5739.	5265.	80.	2425.	-869.	-227.	38.	346.	87.
3	.362	-.691	-26.	3374.	10169.	11868.	-4515.	1166.	-571.	475.	340.	-47.	-498.	-29.
4	1.974	-1.854	2841.	-4008.	-12593.	-13146.	9592.	-154.	21.	-4866.	-548.	178.	809.	47.
5	3.283	-1.918	5558.	-9157.	-27553.	-40638.	20133.	-613.	4838.	-4271.	-1251.	-99.	1324.	148.
6	3.571	-1.865	11745.	-9859.	-21357.	-42702.	26324.	2017.	4907.	119.	-1322.	-7.	1324.	-65.
7	2.220	-1.184	2011.	-2820.	-14405.	-15722.	11270.	-344.	3155.	2065.	-524.	7.	841.	198.
8	2.620	-2.000	7187.	-2208.	-7302.	-25745.	13558.	-196.	8165.	1359.	-961.	-119.	579.	-188.
9	2.189	-1.304	5700.	-712.	-2857.	-11719.	9458.	-1913.	4139.	2158.	-440.	148.	341.	-286.
10	1.722	-.885	5078.	-1988.	-3985.	-10250.	8176.	-778.	1784.	1867.	-336.	-79.	281.	-87.
11	1.868	-.317	6289.	-7318.	-7049.	-11936.	9253.	1241.	-5279.	-559.	-105.	-52.	453.	13.
12	2.000	.199	2966.	-10584.	-9384.	-12792.	8405.	-728.	-9769.	-1185.	-72.	17.	696.	-19.
SIGMA								1015.		1788.		87.		134.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (SP SIN COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
13857.68	-14527.19	-48.68	744.42
-4479.10	9282.94	-138.72	-248.58
8212.89	-4482.66	-229.94	592.82

N	T1C	T1S	Lab	Mab	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	1.000	-1.236	149.	11719.	18459.	12928.	-7095.	-1449.	11198.	2758.	69.	119.	-652.	-197.
2	1.513	-1.402	835.	6582.	11457.	7488.	-4134.	1095.	6879.	651.	39.	18.	-439.	26.
3	.362	-.691	3086.	-10730.	-2986.	-14956.	5721.	-47.	-8871.	-749.	-182.	-187.	248.	-8.
4	1.974	-1.854	-889.	8597.	6560.	7366.	-4858.	3305.	9145.	-1969.	-59.	-79.	-298.	626.
5	3.283	-1.918	-3508.	23455.	28785.	23288.	-17857.	-401.	27970.	-199.	6.	84.	-1995.	-110.
6	3.571	-1.865	-6749.	21758.	23341.	12893.	-17196.	1334.	26277.	-179.	-194.	-254.	-1124.	117.
7	2.220	-1.184	-1044.	13357.	15769.	12617.	-9601.	-2992.	15532.	2769.	-25.	93.	-784.	-209.
8	2.620	-2.000	4569.	17663.	22472.	16561.	-15161.	-889.	16507.	-1672.	89.	6.	-1059.	-17.
9	2.189	-1.304	-629.	10878.	16112.	12037.	-7709.	-257.	10809.	-1369.	34.	162.	-681.	-84.
10	1.722	-.885	-2272.	5137.	5649.	4980.	-5825.	-2965.	5196.	-497.	-8.	95.	-915.	-51.
11	1.868	-.317	1642.	2210.	-251.	-4547.	2187.	87.	5120.	1116.	-244.	5.	68.	-58.
12	2.000	.199	1901.	-3268.	-11407.	-14760.	7588.	1853.	1622.	-1378.	-444.	-48.	518.	167.
SIGMA								2169.		1575.		116.		264.

HARMONIC COMPONENTS: HUB MOMENTS HUB SHEAR FORCES

N	T1C	T1S	Mac	L1C	Mmc	Lac	Y2C	X2C	Y0C	X0C
1	1.000	-1.236	6552.	10028.	-2684.	-1140.	271.	-478.	520.	174.
2	1.513	-1.402	3270.	5659.	-856.	-416.	152.	-930.	191.	195.
3	.362	-.691	-5047.	-6695.	-2873.	2178.	-120.	290.	-288.	58.
4	1.974	-1.854	2845.	9249.	-2928.	109.	536.	-971.	279.	-95.
5	3.283	-1.918	11761.	21551.	-6419.	-1618.	659.	-1275.	685.	29.
6	3.571	-1.865	11419.	26299.	-6148.	51.	1859.	-1221.	665.	-90.
7	2.220	-1.184	6378.	12358.	-3723.	-1126.	633.	-616.	488.	99.
8	2.620	-2.000	11484.	15922.	-3698.	-1484.	265.	-1900.	516.	59.
9	2.189	-1.304	5726.	9768.	-1785.	-908.	164.	-591.	198.	111.
10	1.722	-.885	3787.	6488.	-1958.	690.	166.	-524.	139.	-19.
11	1.868	-.317	-2795.	7167.	-1566.	2067.	559.	-58.	44.	-126.
12	2.000	.199	-8648.	5013.	-1091.	5391.	669.	222.	25.	-194.

Table I. (Continued)

TEST 20 LOCKED GYRO MODE

VKT = 89.37 RPM = 83.6 MU = 1.07 P = 2.39

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (MEAN COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
7004.71	33417.31	-15.99	-478.70
285.03	-7029.95	-15.93	117.78
5329.15	5364.17	-88.86	-98.86

#	T1C	T1S	Lsh	Msh	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	2.176	-1.010	5941.	11665.	12750.	13149.	2968.	783.	11004.	-1384.	59.	19.	-272.	52.
2	1.602	-.788	8269.	18149.	18725.	18059.	5648.	448.	18112.	590.	-9.	-42.	-418.	-6.
3	1.101	-.527	10141.	22075.	21944.	23019.	6876.	408.	21685.	-849.	38.	25.	-476.	26.
4	2.123	-1.060	6836.	11539.	12642.	12992.	1208.	-877.	10767.	-1548.	89.	38.	-533.	16.
5	2.156	-1.198	4687.	12488.	11923.	13884.	1381.	227.	11869.	699.	58.	-9.	-245.	13.
6	2.561	-1.693	2713.	7818.	8247.	9875.	251.	466.	8998.	-787.	89.	5.	-225.	7.
7	1.926	-1.095	8190.	15011.	15163.	18469.	2256.	598.	14388.	898.	58.	8.	-558.	-12.
8	1.816	-1.033	586.	13147.	8230.	16803.	-5315.	-870.	11559.	-948.	149.	17.	-537.	-39.
9	1.304	-2.178	-898.	16289.	6767.	18854.	-6275.	-8.	12811.	699.	191.	-7.	-507.	5.
10	1.950	-1.168	5361.	10484.	14557.	14844.	1505.	39.	10791.	1158.	18.	-41.	-569.	-33.
11	2.070	-.590	7698.	15628.	17548.	15706.	5319.	-1051.	15579.	279.	5.	-2.	-498.	-19.
12	2.606	.090	13617.	16695.	22958.	19979.	7765.	-588.	17159.	561.	-61.	-5.	-611.	-17.
SIGMA								597.		826.		19.		23.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (3P COS COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
37337.15	-35747.87	-756.51	815.36
-10811.36	15158.05	217.26	-511.10
10491.28	1138.26	-229.55	-98.96

#	T1C	T1S	Lsh	Msh	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	2.176	-1.010	1751.	-8748.	-3654.	-6988.	6145.	527.	-8205.	-286.	-48.	7.	218.	41.
2	1.602	-.788	7680.	-10765.	-847.	-26538.	11681.	-87.	-16204.	156.	-231.	0.	561.	-9.
3	1.101	-.527	12758.	-20455.	367.	-37800.	18182.	-1716.	-26310.	-652.	-376.	26.	696.	1.
4	2.123	-1.060	-1228.	-8141.	-6654.	-8237.	1180.	-2085.	-8035.	671.	-4.	32.	218.	21.
5	2.156	-1.198	1267.	-8567.	-2533.	-9832.	2614.	1465.	-7775.	668.	-81.	-35.	151.	-38.
6	2.561	-1.693	-9286.	-1888.	-11133.	2661.	-8478.	-2671.	-3885.	-1172.	176.	35.	74.	-2.
7	1.926	-1.095	2085.	-13260.	-4476.	-15615.	4660.	-253.	-12140.	-116.	-56.	-5.	215.	1.
8	1.816	-1.033	-2886.	-10604.	-12404.	-10355.	1713.	1078.	-10612.	521.	2.	-10.	552.	8.
9	1.304	-2.178	-6526.	-12978.	-16567.	-12434.	824.	488.	-12106.	-735.	22.	-1.	656.	1.
10	1.950	-1.168	2680.	-12880.	-5256.	-16562.	5908.	910.	-10802.	709.	-115.	-47.	228.	-25.
11	2.070	-.590	7484.	-10612.	2885.	-15015.	8596.	830.	-8527.	662.	-184.	-10.	152.	-1.
12	2.606	.090	12604.	-6575.	11153.	-13325.	13235.	961.	-3586.	-612.	-278.	-12.	58.	-3.
SIGMA								1302.		656.		28.		18.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (3P SIN COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
37853.30	36781.95	-856.53	-851.22
-10384.65	-11145.70	318.59	358.53
-1488.23	11915.53	17.75	-345.19

#	T1C	T1S	Lsh	Msh	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	2.179	-1.010	9298.	-888.	9655.	-5986.	9220.	1181.	1878.	771.	-213.	-93.	-6.	61.
2	1.602	-.788	10052.	8151.	24877.	-2887.	15156.	-853.	10819.	145.	-559.	5.	-182.	-13.
3	1.101	-.527	28598.	11494.	38996.	-1434.	24284.	1611.	17164.	-1388.	-516.	-4.	-501.	50.
4	2.123	-1.060	8577.	-6160.	8071.	-8985.	4434.	-437.	-2965.	-1988.	-195.	6.	19.	59.
5	2.156	-1.198	9101.	-826.	9371.	-5222.	8978.	981.	1117.	2166.	-178.	19.	-11.	-6.
6	2.561	-1.693	2197.	-11333.	-2791.	-12988.	4305.	1988.	-10969.	-1849.	-68.	-1.	197.	28.
7	1.926	-1.095	19379.	-58.	15544.	-7457.	12621.	643.	4202.	598.	-298.	-55.	-86.	7.
8	1.816	-1.033	15852.	-6252.	15888.	-15268.	15578.	-1765.	-9991.	65.	-998.	19.	-8.	-15.
9	1.304	-2.178	23868.	-7878.	23462.	-14399.	22788.	488.	-10995.	1193.	-649.	-15.	-28.	-37.
10	1.950	-1.168	12129.	-798.	14898.	-8238.	10903.	-611.	1994.	0.	-217.	57.	-110.	-46.
11	2.070	-.590	8848.	1208.	14744.	251.	7713.	-1218.	8458.	-947.	-178.	28.	-199.	-18.
12	2.606	.090	8189.	13681.	13960.	8928.	2778.	-539.	13488.	1677.	-49.	-12.	-318.	-56.
SIGMA								987.		1584.		31.		38.

HARMONIC COMPONENTS: HUB MOMENTS HUB SHEAR FORCES

#	T1C	T1S	M1C	L1C	MnC	LnC	Y1C	X1C	YnC	XnC
1	2.176	-1.010	-8712.	2913.	588.	1237.	215.	-28.	3.	-21.
2	1.602	-.788	-15675.	18837.	-536.	824.	347.	-946.	-5.	15.
3	1.101	-.527	-24262.	17666.	-87.	526.	505.	-581.	-11.	9.
4	2.123	-1.060	-8265.	-633.	170.	1612.	208.	3.	13.	-7.
5	2.156	-1.198	-8670.	2015.	500.	981.	166.	-41.	-12.	-20.
6	2.561	-1.693	-6855.	-9137.	256.	1859.	78.	185.	4.	-11.
7	1.926	-1.095	-12781.	4853.	148.	829.	278.	-91.	-18.	-8.
8	1.816	-1.033	-15945.	-289.	-526.	2882.	378.	-2.	16.	6.
9	1.304	-2.178	-22491.	-376.	-205.	1259.	495.	-1.	1.	25.
10	1.950	-1.168	-10853.	3251.	50.	1857.	222.	-113.	8.	-2.
11	2.070	-.590	-8845.	8126.	-552.	1670.	185.	-190.	7.	8.
12	2.606	.090	-9853.	12860.	-6284.	378.	78.	263.	-28.	694.

Table I. (Continued)

TEST 21 LOCKED GYRO MODE

VKT = 89.56 RPM = 61.0 MU = 1.08 P = 2.46

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (MEAN COMPONENT)

ROW1:d(0)	ROW2:d(T1C)	ROW3:d(T1S)	
d(Lh)	d(Mh)	d(Fx)	d(Fy)
19461.19	36701.80	-98.26	-572.76
885.77	-9700.18	2.93	76.04
8551.68	5802.77	-101.93	-186.85

N	T1C	T1S	Lch	Mch	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	2.883	-1.961	3517.	7883.	6242.	11196.	2587.	186.	4015.	-1000.	144.	-0.	-180.	40.
2	1.133	-1.405	8581.	15898.	13288.	18783.	5288.	-1282.	10849.	160.	112.	39.	-378.	-16.
3	1.388	-.873	10715.	21288.	19568.	23886.	8817.	-93.	20787.	-1867.	79.	69.	-353.	22.
4	2.886	-1.752	6182.	9186.	8698.	12886.	2190.	-1057.	7525.	-1136.	146.	16.	-181.	-5.
5	3.367	-2.262	1345.	4878.	3136.	9058.	558.	-461.	1860.	-868.	149.	18.	-72.	10.
6	3.938	-2.817	-2298.	-1725.	-3462.	5379.	-1989.	-105.	-4456.	-867.	241.	61.	30.	8.
7	2.733	-1.555	8290.	12860.	13775.	16554.	5869.	1413.	12116.	1925.	87.	-65.	-219.	-17.
8	2.376	-2.563	-998.	8472.	1486.	13600.	-2309.	-780.	4207.	-282.	205.	-5.	-119.	6.
9	2.256	-3.162	-3043.	8039.	-623.	14946.	-4107.	952.	5181.	1790.	249.	-51.	-97.	-27.
10	1.886	-1.876	5038.	10382.	9801.	13784.	3068.	893.	8978.	-1199.	138.	-6.	-179.	0.
11	2.821	-1.029	19288.	16118.	18659.	15124.	7548.	115.	19460.	921.	68.	-15.	-257.	-7.
12	3.297	-.622	13243.	13182.	20465.	13062.	10229.	515.	13250.	882.	-8.	-21.	-275.	-16.
SIGMA								802.		1094.		28.		18.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (3P COS COMPONENT)

ROW1:d(0)	ROW2:d(T1C)	ROW3:d(T1S)	
d(Lh)	d(Mh)	d(Fx)	d(Fy)
30321.96	-38603.62	-763.90	729.32
-8070.17	13627.68	156.88	-248.70
11828.37	1116.80	-265.89	-52.75

N	T1C	T1S	Lch	Mch	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	2.883	-1.961	-9361.	-1998.	-13076.	1720.	-7718.	282.	-4078.	1224.	109.	3.	148.	28.
2	1.133	-1.405	842.	-18575.	-7506.	-18605.	6088.	-582.	-15108.	-1597.	-61.	24.	322.	49.
3	1.388	-.873	12138.	-25856.	3129.	-31578.	16171.	-615.	-20599.	1598.	-539.	5.	582.	-88.
4	2.886	-1.752	-8529.	-5892.	-11129.	-112.	-7094.	-2056.	-5626.	587.	168.	22.	112.	-15.
5	3.367	-2.262	-14567.	2228.	-13158.	10032.	-14269.	1139.	-1212.	-1879.	319.	-22.	26.	16.
6	3.938	-2.817	-26366.	15700.)	-22586.	30625.	-28013.	-1190.	9202.	2088.	589.	25.	-153.	-52.
7	2.733	-1.555	-1776.	-8488.	-8598.	-6538.	352.	2509.	-7195.	-709.	17.	-69.	193.	41.
8	2.376	-2.563	-15918.	-8586.	-20982.	-1992.	-12369.	-1611.	-11166.	859.	255.	3.	230.	-36.
9	2.256	-3.162	-19938.	-11544.	-24966.	-2995.	-15958.	1368.	-15419.	-1712.	379.	-15.	388.	25.
10	1.886	-1.876	-6858.	-7298.	-10886.	-4118.	-5076.	-198.	-8898.	-781.	128.	6.	181.	-19.
11	2.821	-1.029	2952.	-6512.	-69.	-7346.	4281.	929.	-6161.	-1571.	-35.	16.	121.	98.
12	3.297	-.622	4951.	928.	7158.	-1246.	3978.	-551.	1884.	246.	-47.	-13.	-88.	-30.
SIGMA								1262.		1292.		21.		40.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (3P SIN COMPONENT)

ROW1:d(0)	ROW2:d(T1C)	ROW3:d(T1S)	
d(Lh)	d(Mh)	d(Fx)	d(Fy)
32797.56	36888.29	-761.13	-952.12
-10693.88	-7620.51	230.88	211.62
-1688.58	15242.56	15.65	-289.65

N	T1C	T1S	Lch	Mch	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	2.883	-1.961	2188.	-13517.	-4319.	-15292.	5054.	-406.	-12728.	-2008.	-71.	38.	260.	39.
2	1.133	-1.405	13838.	-1895.	15852.	-9644.	12654.	520.	1448.	-855.	-502.	-35.	-89.	6.
3	1.388	-.873	22299.	10151.	23020.	421.	17988.	-1398.	14366.	-951.	-975.	89.	-389.	17.
4	2.886	-1.752	3377.	-9624.	-709.	-12982.	5175.	-555.	-9358.	-968.	-114.	5.	183.	19.
5	3.367	-2.262	-2318.	-17164.	-12192.	-17859.	2055.	1522.	-14828.	1978.	-28.	-51.	347.	-13.
6	3.938	-2.817	-16337.	-24151.	-22264.	-24624.	-6435.	-1854.	-21178.	-1849.	101.	55.	718.	28.
7	2.733	-1.555	8250.	-5618.	6588.	-9560.	8990.	2855.	-5879.	886.	-158.	-25.	87.	-9.
8	2.376	-2.563	8250.	-17576.	582.	-23844.	11595.	-51.	-16495.	548.	-440.	-29.	546.	19.
9	2.256	-3.162	9728.	-24539.	-213.	-31191.	14099.	198.	-21398.	871.	-476.	-6.	398.	-45.
10	1.886	-1.876	8578.	-9312.	9237.	-13870.	8075.	-2.	-7298.	346.	-182.	-16.	134.	-7.
11	2.821	-1.029	5288.	1959.	7649.	-1697.	4332.	8.	2878.	892.	-120.	-15.	-88.	-20.
12	3.297	-.622	-1035.	4367.	1188.	4456.	-2015.	-959.	4248.	641.	0.	-7.	-89.	-16.
SIGMA								1175.		947.		32.		22.

HARMONIC COMPONENTS: HUB MOMENTS HUB SHEAR FORCES

N	T1C	T1S	MJC	LJC	MAC	LAC	YJC	XJC	YAC	XAC
1	2.883	-1.961	-4565.	-10222.	489.	2504.	110.	225.	30.	-58.
2	1.133	-1.405	-13881.	2768.	-1227.	1320.	512.	-45.	10.	26.
3	1.388	-.873	-19190.	15213.	-1211.	958.	388.	-369.	-5.	60.
4	2.886	-1.752	-5300.	-7726.	-125.	852.	115.	154.	-1.	-8.
5	3.367	-2.262	-1834.	-15540.	421.	1279.	28.	334.	-8.	-62.
6	3.938	-2.817	7818.	-24578.	1393.	1558.	-167.	655.	16.	-84.
7	2.733	-1.555	-8472.	-1661.	818.	2819.	176.	42.	18.	-29.
8	2.376	-2.563	-11381.	-13637.	216.	1868.	269.	280.	-10.	-70.
9	2.256	-3.162	-14756.	-18630.	-657.	2674.	317.	384.	-13.	-14.
10	1.886	-1.876	-8366.	-8187.	-512.	1111.	172.	151.	-11.	-5.
11	2.821	-1.029	-5237.	3588.	-906.	702.	120.	-68.	1.	27.
12	3.297	-.622	1969.	6136.	-66.	-184.	-46.	-88.	-42.	1.

Table I. (Continued)

TEST 22 LOCKED GYRO MODE

VKT = 88.28 RPM = 42.7 MU = 2.82 P = 4.26

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (MEAN COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
4717.92	22025.58	-93.15	-471.29
259.82	-2966.82	.53	56.26
2021.57	2135.44	-49.52	-41.09

N	T1C	T1S	Lab	Mab	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	3.244	-2.210	1534.	8271.	8552.	10856.	-678.	-462.	7128.	-619.	109.	23.	-201.	6.
2	2.728	-1.697	2965.	10849.	8216.	12239.	556.	-626.	9858.	-712.	71.	17.	-235.	19.
3	1.890	-1.125	4847.	14382.	13946.	15209.	2563.	305.	13965.	-49.	36.	9.	-116.	7.
4	3.305	-2.287	888.	7810.	5250.	10159.	-1867.	-647.	6561.	-1062.	106.	22.	-170.	22.
5	3.590	-2.521	1788.	7710.	6122.	9903.	-155.	888.	6739.	876.	68.	-8.	-176.	-1.
6	4.316	-2.979	-673.	6209.	2186.	7571.	-1932.	43.	2935.	-19.	124.	4.	-116.	0.
7	3.186	-2.125	1163.	7348.	4825.	10047.	-326.	-447.	6132.	-1447.	110.	36.	-151.	48.
8	2.828	-2.548	1578.	9436.	6936.	11678.	-1065.	149.	8429.	166.	98.	-7.	-225.	-9.
9	2.340	-3.055	70.	12107.	6499.	13287.	-2799.	-76.	10159.	1536.	87.	-30.	-257.	-50.
10	3.054	-1.980	4243.	10011.	10512.	11217.	1568.	1248.	9475.	676.	66.	-20.	-245.	-19.
11	3.396	-1.788	3239.	8746.	8928.	9982.	722.	-597.	8303.	-47.	46.	-11.	-228.	-11.
12	3.884	-.877	6636.	10265.	13616.	9885.	3538.	125.	10427.	1489.	-15.	-30.	-265.	-36.
SIGMA								550.		976.		21.		25.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (3P COS COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
15388.35	-12826.57	-186.69	286.27
-3567.36	2438.99	55.01	-32.73
1658.69	2768.76	-51.52	-51.52

N	T1C	T1S	Lab	Mab	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	3.244	-2.210	-1627.	-11101.	-5832.	-9228.	427.	-232.	-11919.	-1013.	75.	7.	188.	0.
2	2.728	-1.697	694.	-10253.	-5373.	-9758.	1492.	-760.	-10465.	311.	20.	-3.	163.	-6.
3	1.890	-1.125	5833.	-12066.	-1679.	-13588.	7805.	783.	-11348.	-123.	-61.	-18.	170.	-8.
4	3.305	-2.287	-2262.	-9860.	-5509.	-8050.	-389.	-717.	-10022.	962.	72.	-2.	170.	2.
5	3.590	-2.521	-2165.	-9268.	-5690.	-7564.	-607.	616.	-9986.	922.	67.	-30.	161.	-25.
6	4.316	-2.979	-5350.	-9537.	-9419.	-5699.	-3562.	700.	-10920.	-542.	145.	-7.	142.	5.
7	3.186	-2.125	-1572.	-8638.	-5358.	-8887.	88.	-897.	-9484.	1611.	78.	8.	151.	-16.
8	2.828	-2.548	-1071.	-12629.	-5762.	-10852.	907.	-676.	-13415.	-459.	72.	17.	188.	-5.
9	2.340	-3.055	777.	-14471.	-5305.	-13988.	3496.	866.	-15348.	-2.	64.	-5.	247.	23.
10	3.054	-1.980	57.	-11436.	-4445.	-9287.	2041.	375.	-11824.	-1081.	73.	29.	180.	13.
11	3.396	-1.788	-1301.	-7991.	-4890.	-5726.	281.	-588.	-8489.	798.	75.	15.	144.	-3.
12	3.884	-.877	-66.	-5884.	-5225.	-4538.	1328.	713.	-6581.	-633.	51.	-5.	128.	19.
SIGMA								868.		744.		10.		13.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (3P SIN COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
-3158.29	13244.47	25.65	-185.78
-587.77	-4226.51	20.82	66.75
-2914.53	2619.65	59.00	-23.64

N	T1C	T1S	Lab	Mab	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	3.244	-2.210	-1582.	-5918.	-3388.	-5879.	-683.	-1900.	-9287.	348.	-2.	55.	82.	-2.
2	2.728	-1.697	-651.	-6234.	-1855.	-6162.	168.	-16.	-6283.	-1549.	9.	21.	56.	20.
3	1.890	-1.125	-794.	2234.	-20.	1971.	-1142.	-171.	2354.	67.	-11.	-9.	-31.	2.
4	3.305	-2.287	-50.	-7619.	-1907.	-8003.	768.	-816.	-7122.	-447.	-27.	14.	76.	-15.
5	3.590	-2.521	3.	-6838.	-1818.	-7776.	849.	-1251.	-6132.	2400.	-44.	3.	77.	-38.
6	4.316	-2.979	1032.	-14878.	-3543.	-14627.	1651.	842.	-14998.	-1297.	-76.	-19.	201.	29.
7	3.186	-2.125	2047.	-7435.	300.	-9126.	2815.	1834.	-6468.	-871.	-76.	-37.	79.	-7.
8	2.828	-2.548	2038.	-7286.	1302.	-9177.	2958.	305.	-6619.	-1068.	-76.	-38.	65.	-17.
9	2.340	-3.055	3365.	-6880.	1826.	-7261.	4067.	-346.	-5568.	1111.	-105.	3.	62.	19.
10	3.054	-1.980	1726.	-6084.	551.	-8141.	2335.	1647.	-6696.	359.	-46.	-17.	55.	-10.
11	3.396	-1.788	175.	-5278.	-2205.	-5456.	1215.	1379.	-5371.	211.	-9.	13.	46.	14.
12	3.884	-.877	-6686.)	-3913.	-6948.	-2712.	-3697.	-638.	-6838.	898.	68.	-9.	81.	3.
SIGMA								1895.		1078.		18.		18.

HARMONIC COMPONENTS: HUB MOMENTS HUB SHEAR FORCES

N	T1C	T1S	M2C	L2C	M4C	L4C	Y4C	X2C	Y4C	X4C
1	3.244	-2.210	-5658.	-8730.	-8261.	9157.	85.	78.	83.	-6.
2	2.728	-1.697	-5516.	-489.	-5164.	5378.	80.	59.	85.	-18.
3	1.890	-1.125	-5123.	5081.	-8249.	2725.	91.	-46.	86.	-15.
4	3.305	-2.287	-5695.	-5755.	-4027.	5366.	48.	75.	72.	-1.
5	3.590	-2.521	-5417.	-5570.	-4567.	2782.	93.	72.	68.	-5.
6	4.316	-2.979	-7285.	-8033.	-3634.	5288.)	116.	178.	46.	-28.
7	3.186	-2.125	-6116.	-3986.	-3196.	5376.	110.	70.	60.	0.
8	2.828	-2.548	-6173.	-2711.	-5234.	9706.	132.	99.	98.	19.
9	2.340	-3.055	-9722.	-22.	-5878.	9310.	175.	51.	72.	-11.
10	3.054	-1.980	-7681.	-1228.	-4746.	5268.	112.	84.	68.	0.
11	3.396	-1.788	-4816.	-2546.	-3593.	2837.	67.	85.	76.	-10.
12	3.884	-.877	-1552.	-1559.	-5808.	2883.	59.	71.	87.	-29.

Table I. (Continued)

TEST 23 LOCKED GYRO MODE

VKT = 101.91 RPM = 242.6 MU = 0.41 P = 1.25

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (MEAN COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
9378.38	54856.82	298.57	-445.24
14547.78	-27442.34	-96.46	177.69
23696.12	15469.38	-195.51	-5.87

N	T1C	T1S	Lah	Mah	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	1.735	-1.633	1409.	-7764.	3177.	-505.	823.	-33.	-19959.	-126.	200.	-69.	-71.	61.
2	.721	-1.861	-1295.	28912.	4665.	37856.	-4705.	106.	21858.	218.	396.	1.	-910.	9.
3	.975	-.860	2456.	23474.	10663.	56155.	-1161.	-4337.	17989.	-147.	588.	168.	-328.	-68.
4	.209	-.911	-7285.	41207.	8297.	54494.	-12235.	-2945.	34492.	-1992.	488.	87.	-652.	-98.
5	1.482	-1.250	7865.	31111.	11253.	13141.	8054.	4741.	1589.	2534.	391.	-52.	-144.	33.
6	2.292	-1.488	6867.	-21644.	7129.	-14557.	6767.	-744.	-24472.	2598.	276.	-59.	-10.	22.
7	3.016	-2.441	-8158.	-60360.	-8828.	-66848.	-7998.	-3620.	-68253.	-4359.	558.	144.	17.	-83.
8	1.303	-1.081	8828.	11616.	11548.	18958.	4745.	2033.	8371.	1525.	296.	-51.	-189.	71.
9	1.655	-2.107	-12190.	-15185.	-9792.	-4006.	-13234.	3258.	-17175.	2017.	384.	-105.	-98.	67.
10	1.429	-1.168	5109.	7567.	9515.	14588.	9164.	673.	6528.	2563.	274.	-72.	-176.	11.
11	1.217	-.153	28788.	26477.	32687.	29384.	26179.	717.	22581.	-1698.	196.	-12.	-235.	-7.
SIGMA								2661.		2281.		85.		63.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (3P COS COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
-5868.48	-2512.46	378.71	-229.34
6686.78	-455.16	-182.68	223.78
-3263.28	-2059.56	177.35	-76.75

N	T1C	T1S	Lah	Mah	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	1.735	-1.633	8317.	-2019.	1254.	-7311.	11634.	1078.	334.	627.	-212.	-19.	283.	13.
2	.721	-1.861	2481.	-395.	1716.	2118.	2789.	671.	-1501.	-821.	100.	38.	30.	16.
3	.975	-.860	2926.	-892.	1533.	-1479.	2982.	-469.	-565.	619.	-31.	-79.	60.	-17.
4	.209	-.911	-20.	1805.	931.	6194.	-636.	1882.	-155.	596.	176.	-5.	-38.	79.
5	1.482	-1.250	4987.	-1514.	654.	-2084.	6895.	-1172.	-1262.	-482.	-94.	91.	173.	-26.
6	2.292	-1.488	10482.	-1796.	902.	-8288.	14581.	550.	1056.	1599.	-250.	65.	320.	-19.
7	3.016	-2.441	15981.	-8818.	-2608.	-22514.	22837.	677.	396.	-416.	-454.	-91.	797.	73.
8	1.303	-1.081	4892.	-2270.)	2335.	-3588.	6016.	-307.	-1811.	-481.	-62.	8.	102.	-65.
9	1.655	-2.107	8375.	-1980.	2858.	-10911.	10903.	-1093.	1746.	847.	-163.	-46.	250.	-73.
10	1.429	-1.168	4527.	-2037.	557.	-3331.	6858.	-591.	-1457.	-741.	-55.	57.	178.	-8.
11	1.217	-.153	1958.	-1787.	235.	374.	2716.	-31.	-2712.	13.	84.	-63.	89.	10.
SIGMA								761.		802.		67.		63.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (3P SIN COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
3611.53	-4833.23	436.73	142.92
-543.48	5118.78	-302.83	-88.84
4611.52	-2287.87	-26.71	280.72

N	T1C	T1S	Lah	Mah	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	1.735	-1.633	-331.	7087.	6484.	5248.	-5325.	328.	7541.	217.	-19.	4.	-272.	27.
2	.721	-1.861	1402.	3506.	5622.	8886.	423.	1797.	939.	-199.	218.	-28.	-89.	61.
3	.975	-.860	-706.	6117.	3523.	10071.	-2678.	-1784.	1441.	-495.	298.	75.	-161.	-65.
4	.209	-.911	-697.	2347.	1982.	11287.	-1554.	-1034.	-1598.	578.	359.	-48.	-48.	-58.
5	1.482	-1.250	83.	5615.	4354.	4845.	-1749.	909.	5885.	54.	-74.	-67.	-171.	68.
6	2.292	-1.488	805.	8632.	10146.	3470.	-3314.	877.	10901.	885.	-298.	14.	-376.	-15.
7	3.016	-2.441	-2917.	10758.	12954.	-751.	-9980.	-1104.	14811.	-170.	-478.	-44.	-636.	-28.
8	1.303	-1.081	85.	5320.	4142.	4370.	-1713.	154.	6850.	944.	62.	-27.	-165.	26.
9	1.655	-2.107	-1525.)	9221.	10298.	10316.	-6730.	-149.	8739.	279.	44.	58.	-675.	-66.
10	1.429	-1.168	114.	5087.	4453.	4930.	-1806.	516.	6272.	-892.	76.	61.	-174.	44.
11	1.217	-.153	2185.	2396.	3179.	4250.	1766.	-524.	1871.	122.	65.	-8.	-48.	-66.
SIGMA								996.		649.		84.		60.

Table I. (Continued)

TEST 23 CONTINUED

SWASHPLATE DERIVATIVES DUE TO CYCLIC ANGLES

RW1:d(0) RW2:d(TC) RW3:d(TS)

	(3P COS COMPONENT)						(3P SIN COMPONENT)			
			d(Lsp)	d(Msp)			d(Lsp)	d(Msp)		
			-63.00	-84.15			102.18	-67.67		
			31.77	7.64			-47.92	33.13		
			19.81	-75.38			67.79	8.03		
N	T1C	T1S	Lsp	D(Lsp)	Msp	D(Msp)	Lsp	D(Lsp)	Msp	D(Msp)
1	1.735	-1.453	-14.	2.	68.	23.	-54.	24.	8.	18.
2	.721	-1.061	-27.	13.	-22.	-21.	-25.	-22.	-15.	17.
3	.975	-.880	-16.	15.	-16.	-6.	-37.	-38.	-22.	0.
4	.209	-.911	-51.	3.	46.	61.	-53.	-84.	-30.	6.
5	1.482	-1.250	-13.	-2.	-22.	-33.	-26.	28.	-22.	-14.
6	2.282	-1.486	-9.	-6.	72.	27.	-105.	3.	62.	25.
7	5.816	-2.441	23.	18.	144.	22.	-310.	-108.	35.	2.
8	1.585	-1.081	-19.	3.	-3.	-10.	-3.	38.	4.	17.
9	1.655	-2.107	-60.	-28.	50.	-37.	-14.	104.	-52.	-62.
10	1.429	-1.168	-24.	-3.	-9.	-23.	-6.	39.	-1.	9.
11	1.217	-.153	-20.	-12.	-69.	-5.	46.	11.	-41.	-33.
SIGMA				11.		28.		56.		28.

HARMONIC COMPONENTS:			HUB MOMENTS					HUB SHEAR FORCES		
N	T1C	T1S	M2C	L1C	M4C	L4C	Y2C	X1C	Y4C	X4C
1	1.735	-1.453	1820.	9482.	-1505.	1942.	168.	-242.	117.	39.
2	.721	-1.061	-942.	1886.	-559.	925.	-56.	6.	126.	95.
3	.975	-.880	967.	2226.	-1511.	736.	-49.	-96.	139.	65.
4	.209	-.911	718.	-872.	-869.	433.	-196.	60.	156.	136.
5	1.482	-1.250	289.	6278.	-1930.	815.	98.	-97.	75.	76.
6	2.282	-1.486	8185.	12741.	-1129.	1840.	293.	-316.	87.	57.
7	5.816	-2.441	51167.	19324.	-6759.	3513.	583.	-635.	129.	-1.
8	1.585	-1.081	-50.	5659.	-1761.	585.	50.	-102.	72.	61.
9	1.655	-2.107	6268.	9818.	-2482.	1085.	93.	-407.	137.	66.
10	1.429	-1.168	176.	5565.	-1650.	1295.	51.	-115.	125.	61.
11	1.217	-.153	-2228.)	2294.	-483.	422.	2.	25.	67.	63.

Table I. (Continued)

TEST 26 LOCKED GYRO MODE

VKT = 101.87 RPM = 194.1 MU = 0.51 P = 1.36

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (MEAN COMPONENT)

ROW1:d(Q) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
15823.46	93658.52	154.20	-311.75
8968.18	-17855.23	-50.07	88.16
16865.88	13797.55	-93.49	-62.58

n	T1C	T1S	Lab	Mab	Lic	Mic	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	1.837	-1.584	4835.	4801.	7437.	11581.	3295.	386.	3584.	-248.	287.	5.	-116.	-2.
2	1.209	-1.339	6955.	13806.	10627.	22903.	5384.	885.	12685.	-617.	284.	22.	-148.	11.
3	.372	-1.073	6225.	35308.	12013.	42359.	3868.	-284.	32171.	166.	262.	4.	-232.	6.
4	1.791	-1.398	7854.	6826.	10634.	10635.	6629.	-388.	2335.	317.	230.	-8.	-111.	-1.
5	2.531	-2.036	650.	-18150.	909.	-18913.	515.	-201.	-21382.	-1267.	291.	28.	-10.	16.
6	1.924	-1.675	5044.	-246.	7184.	5571.	4098.	854.	-2906.	1407.	233.	-25.	-88.	2.
7	2.010	-2.300	-17457.	-18258.	-16061.	-9002.	-18070.	-1321.	-22382.	272.	272.	1.	-37.	-28.
8	1.479	-1.516	6181.	7888.	8527.	13787.	5145.	1995.	9182.	-606.	238.	-27.	-84.	36.
9	1.583	-.985	13891.	18295.	17601.	20080.	12212.	-413.	15176.	1744.	181.	-18.	-152.	-8.
10	1.152	-.682	19443.	27746.	25251.	32758.	16871.	-1461.	25517.	-970.	201.	17.	-232.	-31.

SIGMA 887. 841. 18. 18.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (3P COS COMPONENT)

ROW1:d(Q) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
-91.35	-8948.27	241.17	-91.01
4319.79	1088.62	-250.03	186.68
279.52	-6296.47	11.85	53.67

n	T1C	T1S	Lab	Mab	Lic	Mic	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	1.837	-1.584	5309.	305.	2542.	-2577.	6525.	-12.	1575.	-1252.	-115.	72.	111.	-16.
2	1.209	-1.339	4480.	-725.	2663.	-2868.	5278.	523.	219.	-577.	-86.	-9.	73.	12.
3	.372	-1.073	2226.	-1288.	4195.	110.	1397.	182.	-1804.	-111.	58.	-80.	-75.	5.
4	1.791	-1.396	5196.	87.	2582.	-3157.	6345.	-911.	1513.	-278.	-129.	94.	105.	-60.
5	2.531	-2.036	7892.	-346.	604.	-15127.	10810.	932.	8187.	-457.	-591.	-175.	284.	16.
6	1.924	-1.675	5597.	3527.	32.	-898.	7628.	-122.	5187.	1495.	-169.	91.	211.	37.
7	2.010	-2.300	5700.	8440.	2226.	1202.	7227.	-552.	11624.	152.	-290.	6.	139.	14.
8	1.479	-1.516	5729.	2071.	4495.	-494.	6195.	525.	3229.	1024.	-103.	63.	55.	-45.
9	1.583	-.985	5583.	-3520.	1909.	-7921.	7254.	780.	-1578.	-554.	-176.	-10.	152.	5.
10	1.152	-.682	2532.	-5002.	-811.	-6985.	3715.	-350.	-6125.	559.	-78.	-52.	126.	33.

SIGMA 594. 779. 79. 30.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (3P SIN COMPONENT)

ROW1:d(Q) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
6579.37	-10755.83	-657.92	595.45
-3216.15	8026.50	176.36	-177.32
6858.19	-3019.50	-295.51	281.44

n	T1C	T1S	Lab	Mab	Lic	Mic	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	1.837	-1.584	-2677.	6334.	5236.	7564.	-5281.	1058.	5817.	-1346.	48.	-57.	-237.	72.
2	1.209	-1.339	-2198.	1958.	958.	-727.	-3587.	223.	3140.	156.	-107.	-46.	-126.	63.
3	.372	-1.073	-774.	-7569.	-1225.	-14238.	-503.	-673.	-4628.	-84.	-267.	4.	28.	-39.
4	1.791	-1.398	-2282.	7665.	3731.	11035.	-4901.	1061.	6175.	-1558.	135.	59.	-248.	68.
5	2.531	-2.036	-6220.	21032.	8279.	31041.	-13045.	-1598.	16594.	892.	401.	2.	-628.	-34.
6	1.924	-1.675	-2445.	10597.	7895.	14117.	-4982.	761.	9039.	-699.	161.	-42.	-112.	-28.
7	2.010	-2.300	-6056.	21645.	12356.	37136.	-14165.	-195.	16780.	654.	622.	57.	-736.	-17.
8	1.479	-1.516	-2484.	6721.	4516.	7933.	-5430.	89.	6183.	496.	48.	-8.	-271.	-8.
9	1.583	-.985	-1830.	4094.	2199.	957.	-5316.	-20.	5674.	349.	-125.	-62.	-153.	-10.
10	1.152	-.682	-512.	-1622.	-1348.	-7197.	-143.	-742.	836.	1058.	-223.	81.	33.	-35.

SIGMA 810. 882. 81. 37.

Table I. (Continued)

TEST 24 CONTINUED

SWASHPLATE DERIVATIVES DUE TO CYCLIC ANGLES

RW1:d(0) RW2:d(TC) RW3:d(TS)

	(3P COS COMPONENT)						(3P SIN COMPONENT)			
	d(Lsp)		d(Msp)				d(Lsp)		d(Msp)	
	-54.18		-104.09				97.18		76.71	
	59.39		59.69				-68.75		17.49	
	59.09		-91.82				55.45		91.97	
#	TIC	TIS	Lsp	D(Lsp)	Msp	D(Msp)	Lsp	D(Lsp)	Msp	D(Msp)
1	1.637	-1.584	-78.	-19.	6.	-54.	-59.	10.	18.	56.
2	1.209	-1.339	-37.	25.	10.	-14.	-83.	-32.	-35.	-10.
3	.372	-1.073	-127.	-93.	-13.	24.	14.	-26.	-10.	5.
4	1.791	-1.398	-27.	3.	59.	-5.	-8.	64.	28.	46.
5	2.531	-2.036	-50.	-25.	191.	59.	-188.	-44.	-97.	-32.
6	1.924	-1.675	-72.	-33.	6.	-73.	-254.	-64.	-17.	26.
7	1.010	-2.900	-83.	25.	152.	15.	-119.	21.	-216.	-61.
8	1.679	-1.516	-36.	20.	57.	10.	-16.	39.	31.	67.
9	1.583	-.985	10.	34.	46.	14.	0.	46.	18.	6.
10	1.132	-.482	-12.	6.	6.	20.	-19.	-19.	-45.	-88.
SIGMA				24.		57.		48.		58.

HARMONIC COMPONENTS:			HUB MOMENTS				HUB SHEAR FORCES			
#	TIC	TIS	MZC	LSC	MMC	LMC	YZC	XZC	YHC	ZHC
1	1.637	-1.584	3428.	6171.	-1859.	334.	31.	-178.	50.	61.
2	1.209	-1.339	1983.	4209.	-1826.	1069.	80.	-106.	-17.	28.
3	.372	-1.073	-699.	-1614.	-1202.	3012.	98.	38.	-171.	18.
4	1.791	-1.398	3207.	6260.	-1694.	85.	-19.	-183.	120.	55.
5	2.531	-2.038	8606.	17702.	-3610.	-2992.	-58.	-408.	342.	14.
6	1.924	-1.675	6084.	8334.	-898.	-706.	55.	-293.	178.	121.
7	1.010	-2.900	12895.	11803.	-1271.	-5776.	-241.	-513.	580.	225.
8	1.679	-1.516	6339.	6288.	-1111.	106.	5.	-187.	91.	84.
9	1.583	-.985	869.	6364.	-2447.	890.	138.	-165.	13.	-11.
10	1.132	-.482	-1991.	2276.	-2134.	1440.	174.	-23.	-49.	-56.

Table I. (Continued)

TEST 25 FREE GYRO MODE

VKT = 102.93 RPM = 243.4 MU = 0.41 P = 1.25

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (MEAN COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
1392.58	63282.10	268.25	-814.64
15185.75	-21189.02	-171.20	258.08
25458.76	24281.98	-359.70	-189.58

#	T1C	T1S	Lab	Mab	Lic	Mic	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	1.664	-1.157	2298.	5531.	7619.	13918.	43.	652.	1832.	1816.	335.	-154.	-205.	-39.
2	1.211	-1.255	-3881.	16697.	5875.	26947.	-7531.	2463.	12170.	9513.	410.	-52.	-311.	-46.
3	.729	-1.121	-8028.	26228.	1557.	38525.	-12268.	1615.	20793.	184.	492.	-8.	-386.	28.
4	1.707	-1.206	1437.	6409.	8909.	14758.	-990.	114.	2726.	4888.	333.	-27.	-219.	-73.
5	2.161	-1.088	15756.	-2751.	11126.	-1970.	19558.	184.	-17233.	-3516.	231.	15.	-17.	49.
6	2.627	-1.115	14921.	-9416.	14630.	-5478.	15013.	3106.	-21145.	4063.	158.	-49.	9.	-14.
7	1.656	-1.022	2299.	4408.	6705.	12871.	320.	-2115.	675.	-2718.	339.	31.	-179.	14.
8	1.795	-1.755	-13177.	-10785.	-12564.	2945.	-15639.	-765.	-16828.	551.	549.	19.	-25.	-8.
9	1.628	-1.580	-15491.	-9721.	-12675.	4378.	-15847.	-2720.	-15927.	-6382.	584.	64.	-35.	63.
10	1.525	-1.098	150.	6479.	5481.	15351.	-2199.	-876.	2565.	-1748.	358.	-1.	-213.	0.
11	1.589	-.805	8485.	10293.	14195.	16532.	5574.	-541.	7634.	-2436.	262.	-5.	-226.	26.
12	1.675	-.200	24770.	23602.	33477.	25086.	20317.	-1598.	22933.	1.	59.	31.	-348.	-4.

SIGMA 1671. 3388. 35. 38.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (3P COS COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
-6610.56	1662.98	-35.92	-393.14
8389.73	-2627.25	-62.29	298.34
-5475.66	172.69	48.64	-168.21

#	T1C	T1S	Lab	Mab	Lic	Mic	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	1.664	-1.157	5872.	-3022.	-395.	-9073.	8830.	-397.	-354.	892.	-242.	-46.	251.	-44.
2	1.211	-1.255	5172.	-1856.	2753.	-6361.	6235.	-791.	219.	642.	-279.	-7.	97.	-20.
3	.729	-1.121	3398.	-617.	2715.	-1446.	3697.	100.	-251.	-535.	-33.	102.	27.	16.
4	1.707	-1.206	5312.	-3805.	-1517.	-8789.	8318.	-1212.	-1606.	-203.	-199.	1.	273.	-42.
5	2.161	-1.088	7490.	-3987.	-3642.	-8681.	12390.	1405.	-1916.	111.	-188.	31.	445.	29.
6	2.627	-1.115	6719.	-4497.	-5032.	-8946.	11593.	-1164.	-3415.	-936.	-98.	143.	470.	-44.
7	1.656	-1.022	5758.	-3167.	-897.	-5935.	8678.	442.	-1968.	-738.	-111.	78.	265.	-4.
8	1.795	-1.755	7826.	-5912.	-5820.	-13369.	12979.	-53.	258.	1819.	-378.	-146.	468.	54.
9	1.628	-1.580	8009.	-5511.	-2653.	-13419.	12702.	1573.	-2025.	-767.	-316.	-103.	426.	72.
10	1.525	-1.098	4451.	-3729.	-1408.	-7210.	7050.	-895.	-2193.	-1185.	-139.	45.	234.	-9.
11	1.589	-.805	4811.	-1950.	-1767.	-3635.	7706.	1027.	-1206.	-144.	-67.	106.	265.	50.
12	1.675	-.200	2057.	-3887.	-1929.	-12753.	3517.	-36.	27.	1124.	-355.	-205.	159.	22.

SIGMA 818. 894. 103. 63.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (3P SIN COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
-24.70	-4078.65	453.28	39.80
2753.61	2735.53	-251.60	29.23
4169.67	-4229.85	61.18	220.01

#	T1C	T1S	Lab	Mab	Lic	Mic	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	1.664	-1.157	8.	6705.	6402.	8361.	-2812.	-2549.	5980.	611.	65.	78.	-256.	-98.
2	1.211	-1.255	-975.	6427.	4553.	8416.	-5410.	-1688.	5107.	565.	115.	22.	-221.	-24.
3	.729	-1.121	-159.	4444.	3093.	9077.	-1591.	1098.	2400.	-255.	185.	-39.	-130.	55.
4	1.707	-1.206	1068.	5393.	5950.	5290.	-1113.	-765.	5435.	-255.	-4.	21.	-196.	-21.
5	2.161	-1.088	2163.	5093.	5744.	255.	496.	-1232.	7222.	1126.	-194.	-62.	-151.	-32.
6	2.627	-1.115	4148.	6261.	5259.	-803.	3660.	1644.	6483.	-832.	-202.	1.	-44.	80.
7	1.656	-1.022	1696.	5064.	5269.	4227.	72.	-207.	5630.	858.	-73.	-28.	-104.	-7.
8	1.795	-1.755	1078.	7151.	8547.	6249.	-2346.	52.	7515.	-742.	-35.	35.	-311.	-17.
9	1.628	-1.580	2090.	6918.	8446.	6657.	-712.	1422.	7905.	852.	-90.	-69.	-254.	6.
10	1.525	-1.098	2472.	3622.	5347.	4532.	1294.	1093.	2931.	-1808.	44.	25.	-115.	42.
11	1.589	-.805	1891.	4454.	3819.	5467.	911.	-87.	4065.	531.	61.	28.	-81.	10.
12	1.675	-.200	3968.	1350.	5280.	1974.	4269.	510.	1074.	-275.	25.	1.	28.	-17.

SIGMA 1279. 812. 61. 44.

Table I. (Continued)

TEST 25 CONTINUED

SWASHPLATE DERIVATIVES DUE TO CYCLIC ANGLES

RM1:d(C) RM2:d(TC) RM3:d(TS)

			(3P COS COMPONENT)				(3P SIN COMPONENT)			
			d(Lsp)		d(Msp)		d(Lsp)		d(Msp)	
			29.65		-81.61		105.51		63.13	
			5.07		17.84		-41.88		17.38	
			33.39		-58.49		58.67		82.62	
N	T1C	T1S	Lsp	D(Lsp)	Msp	D(Msp)	Lsp	D(Lsp)	Msp	D(Msp)
1	1.664	-1.157	-21.	9.	8.	1.	-44.	-23.	-19.	4.
2	1.211	-1.255	-22.	17.	12.	7.	7.	14.	-18.	22.
3	.729	-1.121	-20.	13.	4.	18.	-28.	-48.	-18.	19.
4	1.707	-1.206	-28.	5.	9.	-2.	-20.	6.	-48.	-19.
5	2.161	-1.008	3.	18.	33.	25.	-87.	-93.	24.	27.
6	2.627	-1.115	-13.	11.	33.	12.	-60.	-10.	19.	26.
7	1.656	-1.022	-48.	-26.	-19.	-13.	-3.	11.	-4.	9.
8	1.795	-1.755	-72.	-7.	20.	-28.	-67.	10.	-104.	-33.
9	1.628	-1.588	-74.	-18.	28.	-6.	-7.	34.	-84.	-25.
10	1.525	-1.088	-34.	-7.	-12.	-13.	12.	25.	-9.	12.
11	1.589	-.805	-19.	-9.	11.	28.	2.	2.	-2.	-6.
12	1.675	-.280	20.	-7.	-79.	-29.	56.	29.	28.	-56.
SIGMA				14.		17.		27.		22.

HARMONIC COMPONENTS:			HUB MOMENTS				HUB SHEAR FORCES			
N	T1C	T1S	M4C	L2C	M6C	L4C	Y2C	X2C	Y6C	X6C
1	1.664	-1.157	1229.	7305.	-1583.	1325.	93.	-249.	158.	7.
2	1.211	-1.255	1784.	9571.	-1648.	564.	-11.	-200.	108.	21.
3	.729	-1.121	670.	5348.	-921.	649.	-79.	-82.	106.	48.
4	1.707	-1.206	-267.	6876.	-1549.	1441.	159.	-198.	155.	-1.
5	2.161	-1.008	-1206.	9805.	-719.	2584.	319.	-169.	126.	-18.
6	2.627	-1.115	-3537.	9178.	122.	2715.	336.	-71.	134.	-27.
7	1.656	-1.022	-1008.	7054.	-958.	1674.	149.	-127.	116.	16.
8	1.795	-1.755	1302.	10247.	-1046.	2752.	252.	-345.	216.	-54.
9	1.628	-1.588	-455.	10304.	-1367.	2398.	258.	-285.	168.	-31.
10	1.525	-1.098	-1698.	6820.	-495.	2053.	85.	-127.	159.	-19.
11	1.589	-.805	-1058.	5856.	-148.	1851.	111.	-74.	152.	7.
12	1.675	-.280	-2121.	2445.	2148.	1369.	87.	-164.	92.	-191.

Table I. (Continued)

TEST 26 FREE GYRO MODE

VEL = 182.6% RPM = 183.1 MU = 0.52 P = 1.36

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (MEAN COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
7021.23	61718.13	64.72	-765.25
27948.83	-100514.02	-44.12	238.63
19818.85	149328.23	-230.98	-188.66

#	T1C	T1S	Lsb	Msb	Lic	Mic	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	1.978	-1.304	1983.	6878.	7867.	12118.	2532.	637.	3433.	388.	382.	-32.	-167.	6.
2	1.258	-1.426	-3132.	15085.	4827.	30218.	-6545.	-890.	16306.	-1056.	371.	36.	-310.	5.
3	.892	-1.554	-6587.	24834.	2721.	34829.	-10655.	-10.	20103.	-886.	483.	25.	-377.	8.
4	2.568	-1.063	10201.	-2742.	11588.	2160.	1585.	-817.	-4300.	43.	186.	8.	-55.	-15.
5	3.218	-.778	18681.	-13767.	16145.	-10615.	13787.	185.	-15206.	-1268.	155.	34.	101.	17.
6	1.968	-1.112	3576.	7283.	7801.	13545.	1716.	-2884.	6462.	-2041.	252.	21.	-169.	13.
7	2.288	-2.084	-8881.	-6640.	-8488.	9371.	-9018.	-108.	-11488.	1163.	448.	8.	-15.	1.
8	2.117	-2.561	-15625.	-12307.	-15972.	843.	-15981.	881.	-18899.	1132.	328.	-18.	12.	-22.
9	1.859	-1.375	4111.	8887.	8249.	16979.	2188.	2111.	9444.	1768.	158.	-15.	-185.	-1.
10	1.792	-.570	13781.	15985.	20268.	25178.	10137.	-986.	14453.	-1055.	151.	18.	-198.	19.
11	1.676	.085	27448.	32984.	37859.	38682.	22933.	1990.	33207.	2073.	-66.	-37.	-488.	-32.

SIGMA 1300. 1894. 35. 15.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (3P COS COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
-4330.73	-3161.37	520.65	-265.65
6883.65	-1459.25	-343.97	395.71
-526.57	-4700.85	66.83	-.78

#	T1C	T1S	Lsb	Msb	Lic	Mic	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	1.978	-1.304	8536.	-1950.	660.	-6357.	5218.	-754.	50.	84.	-185.	31.	244.	-47.
2	1.258	-1.426	4161.	93.	-217.	-459.	6084.	1038.	338.	-1324.	-22.	-48.	174.	88.
3	.892	-1.554	4468.	4448.	5056.	4881.	6151.	1583.	4260.	1653.	12.	-128.	-35.	6.
4	2.568	-1.063	8887.	-4715.	-2812.	-20444.	23640.	-258.	-425.	1088.	-385.	20.	652.	-13.
5	3.218	-.778	12237.	-13042.	-5631.	-32011.	28692.	1516.	-4648.	-318.	-788.	-141.	715.	80.
6	1.968	-1.112	5676.	-2587.	-1614.	-5548.	8811.	-775.	-1109.	-294.	-154.	65.	282.	11.
7	2.288	-2.084	8273.	133.	-1019.	-7496.	12567.	460.	3695.	161.	-385.	24.	372.	18.
8	2.117	-2.561	7277.	1076.	-748.	-8225.	10851.	-1217.	4291.	-1193.	-292.	57.	323.	-33.
9	1.859	-1.375	6443.	-991.	1516.	-4326.	8665.	-769.	479.	28.	-135.	61.	202.	-65.
10	1.792	-.570	5760.	-3627.	-269.	-7810.	8123.	88.	-1781.	1362.	-167.	-46.	261.	8.
11	1.676	.085	4211.	-7212.	150.	-5885.	5588.	-1183.	-7792.	-1715.	55.	105.	161.	-58.

SIGMA 1960. 1857. 77. 48.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (3P SIN COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
12135.41	-9880.42	-632.01	501.53
-5676.98	6312.88	113.59	-184.78
6084.29	-3751.45	-298.23	281.40

#	T1C	T1S	Lsb	Msb	Lic	Mic	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	1.978	-1.304	-1337.	7598.	6456.	8194.	-1976.	-1030.	7531.	-68.	24.	45.	-248.	-9.
2	1.258	-1.426	871.	2211.	2317.	-981.	13.	1957.	3618.	356.	-128.	-40.	-78.	53.
3	.892	-1.554	-844.	536.	3166.	-2032.	-2210.	-2020.	1663.	184.	-102.	-32.	-180.	-60.
4	2.568	-1.063	-1784.	11733.	6878.	12511.	-5129.	-2026.	11503.	1237.	31.	62.	-347.	-21.
5	3.218	-.778	-1202.	11525.	6053.	8800.	-4397.	-187.	12888.	-389.	-117.	-48.	-290.	20.
6	1.968	-1.112	1121.	6822.	4112.	3051.	-196.	1471.	7327.	838.	-119.	-37.	-178.	12.
7	2.288	-2.084	-2296.	16085.	10607.	17827.	-7977.	698.	17598.	870.	258.	-85.	-318.	-28.
8	2.117	-2.561	-5120.	16815.	10828.	27441.	-9260.	1595.	12189.	-1237.	429.	58.	-574.	65.
9	1.859	-1.375	-463.	5837.	5096.	6160.	-2266.	818.	5601.	-1673.	13.	77.	-283.	34.
10	1.792	-.570	270.	4323.	2424.	2677.	-856.	-3040.	5134.	1885.	-76.	216.	-102.	-112.
11	1.676	.085	6435.	-7547.	-1804.	-23213.	9709.	5134.	-1521.	-1805.	-567.	-88.	398.	82.

SIGMA 1778. 1075. 88. 60.

Table I. (Continued)

TEST 26 CONTINUED

SWASHPLATE DERIVATIVES DUE TO CYCLIC ANGLES

RM1:d(B) RM2:d(TC) RM3:d(TS)

(3P_COS COMPONENT)

d(Lsp)	d(Msp)
30.37	-23.79
-2.24	34.78
51.89	1.46

(3P SIN COMPONENT)

d(Lsp)	d(Msp)
87.41	39.78
-86.89	-8.55
7.49	27.82

N	T1C	T1S	Lsp	D(Lsp)	Msp	D(Msp)	Lsp	D(Lsp)	Msp	D(Msp)
1	1.978	-1.304	-50.	-16.	62.	0.	4.	29.	16.	29.
2	1.250	-1.426	-38.	0.	1.	-16.	6.	-10.	15.	29.
3	.892	-1.554	-18.	27.	52.	47.	-36.	-73.	-58.	-68.
4	2.568	-1.043	12.	34.	84.	20.	-82.	-25.	-18.	-4.
5	3.210	-.778	-7.	2.	109.	16.	-141.	-50.	-30.	-21.
6	1.948	-1.112	5.	28.	87.	15.	-12.	10.	13.	20.
7	2.206	-1.084	-52.	24.	61.	31.	-62.	-18.	-42.	-7.
8	2.197	-2.561	-128.	-25.	9.	-46.	7.	34.	-98.	-12.
9	1.899	-1.375	-68.	-22.	25.	-15.	16.	37.	32.	35.
10	1.702	-.370	-78.	-75.	-18.	-57.	-12.	-4.	7.	-2.
11	1.076	.885	64.	23.	58.	3.	52.	49.	17.	-11.
SIGMA				31.		30.		38.		24.

HARMONIC COMPONENTS:

HUB MOMENTS

HUB SHEAR FORCES

N	T1C	T1S	M2C	L4C	M4C	L6C	Y2C	X2C	Y4C	X6C
1	1.978	-1.304	2038.	8274.	-1940.	904.	110.	-212.	134.	27.
2	1.250	-1.426	102.	6868.	174.	1226.	181.	-80.	23.	28.
3	.892	-1.554	3435.	2927.	825.	1264.	34.	-72.	-84.	89.
4	2.568	-1.043	9341.	12511.	5815.	1129.	210.	-557.	292.	-414.
5	3.210	-.778	-135.	16469.	-6533.	3645.	416.	-525.	259.	-335.
6	1.948	-1.112	-453.	8109.	-651.	782.	208.	-127.	87.	-7.
7	2.206	-1.084	8756.	12382.	-2241.	-16.	111.	-411.	261.	104.
8	2.197	-2.561	7066.	11510.	-2774.	-679.	-53.	-433.	378.	141.
9	1.899	-1.375	1373.	7173.	-894.	1487.	95.	-168.	108.	34.
10	1.702	-.370	-483.	6763.	-1319.	1630.	157.	-135.	83.	-15.
11	1.076	.885	-8750.	2239.	959.	3751.	354.	175.	-193.	-122.

Table I. (Continued)

TEST 27 FREE GYRO MODE

VKT = 120.54 RPM = 322.4 MU = 0.36 P = 1.18

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (MEAN COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
-13899.41	74198.65	428.35	-923.52
33697.27	-32888.78	-144.32	329.28
27337.83	36865.69	-295.21	-242.56

n	T1C	T1S	Lsh	Msh	L1c	M1c	Th	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	1.275	-1.055	-179.	2720.	6559.	18449.	-3144.	-2153.	-3331.	1410.	549.	-6.	-269.	-18.
2	.773	-.814	-11536.	18286.	-677.	30600.	-16314.	-2268.	12848.	-5575.	485.	-94.	-434.	16.
3	1.227	-1.162	-3535.	4660.	3434.	20658.	-6604.	-1862.	-2302.	3985.	640.	52.	-279.	-32.
4	.675	-1.073	-15100.	22077.	-3411.	30361.	-20241.	1435.	14447.	659.	891.	46.	-468.	-24.
5	1.366	-1.001	2360.	-1788.	7344.	10044.	161.	-1400.	-10235.	-4527.	585.	58.	-208.	37.
6	1.714	-1.298	17811.	-15263.	15001.	-3237.	11938.	4635.	-20552.	7014.	481.	-83.	-88.	-37.
7	1.938	-.998	30115.	-25790.	21020.	-16269.	19700.	-3574.	-30850.	-7290.	461.	20.	-36.	17.
8	1.266	-1.016	5925.	-4451.	8904.	13251.	1158.	1376.	-6474.	-3431.	548.	2.	-215.	58.
9	1.281	-1.557	-13685.	-14098.	-9682.	3503.	-14576.	-64.	-21845.	1196.	704.	1.	-136.	-7.
10	1.187	-1.856	-24059.	-22914.	-22197.	-2946.	-24464.	1627.	-31698.	-1515.	799.	-9.	-74.	19.
11	1.348	-1.063	2489.	712.	8533.	15253.	-176.	-1708.	-5698.	896.	582.	39.	-262.	-7.
12	1.438	-.547	20141.	14419.	29008.	23325.	16221.	-2213.	10485.	2164.	356.	-26.	-355.	-32.
13	1.379	-.527	28568.	18434.	36831.	28855.	24706.	7750.	14183.	3215.	385.	0.	-331.	16.
SIGMA								3579.		3771.		46.		37.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (3P COS COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
-668.82	2285.82	-170.89	184.34
1397.48	-831.55	.84	50.72
-10854.32	-7785.75	437.51	-259.83

n	T1C	T1S	Lsh	Msh	L1c	M1c	Th	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	1.275	-1.055	5341.	2389.	-7540.	-8960.	8137.	-4487.	7559.	-2462.	-453.	178.	436.	-68.
2	.773	-.814	4012.	3182.	-5604.	-10325.	9543.	-867.	9132.	144.	-540.	30.	421.	-20.
3	1.227	-1.162	4503.	2305.	-7329.	-10644.	9714.	-3791.	8136.	-2388.	-521.	148.	475.	-58.
4	.675	-1.073	10659.	2960.	-2233.	-14861.	16333.	4350.	10811.	531.	-713.	-73.	516.	38.
5	1.366	-1.001	8800.	3382.	-4605.	-17719.	16141.	5978.	12678.	3526.	-844.	-136.	576.	82.
6	1.714	-1.298	10273.	2722.	-3048.	-13717.	16136.	285.	9984.	-1511.	-658.	80.	533.	-56.
7	1.938	-.998	9261.	2661.	-4089.	-13829.	15585.	2664.	9925.	863.	-660.	-57.	569.	49.
8	1.266	-1.016	7549.	3868.	-5945.	-17501.	15202.	1014.	12965.	3443.	-696.	-231.	532.	39.
9	1.281	-1.557	11911.	3982.	-4349.	-18328.	19088.	986.	18689.	2984.	-972.	-121.	650.	17.
10	1.187	-1.856	12749.	4628.	-5185.	-17728.	20843.	-522.	14478.	-1634.	-894.	88.	717.	12.
11	1.348	-1.063	4545.	1691.	-7211.	-11905.	9722.	-2883.	7681.	-2012.	-546.	83.	470.	-33.
12	1.438	-.547	2835.	1946.	-6399.	-11036.	8899.	-441.	7665.	1846.	-519.	-110.	369.	-10.
13	1.379	-.527	2654.	427.	-6611.	-4063.	6735.	-304.	2405.	-3250.	-180.	221.	371.	-1.
SIGMA								2660.		2284.		144.		45.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (3P SIN COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
15510.18	1040.58	-38.29	348.07
1885.91	5063.21	-252.85	38.16
1918.32	-31179.58	217.88	196.96

n	T1C	T1S	Lsh	Msh	L1c	M1c	Th	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	1.275	-1.055	18149.	8011.	7897.	-11285.	19803.	3551.	13828.	2202.	-892.	-100.	338.	146.
2	.773	-.814	13413.	6372.	8447.	-7488.	15578.	-5.	7248.	-1200.	-370.	183.	187.	-3.
3	1.227	-1.162	16478.	8342.	8599.	-11883.	19928.	3037.	14285.	2819.	-721.	-125.	315.	142.
4	.675	-1.073	18928.	2878.	10469.	-6341.	21112.	-4063.	6885.	-1579.	-384.	79.	18.	-148.
5	1.366	-1.001	15087.	4012.	11270.	-9985.	15766.	-2802.	10177.	-1538.	-560.	43.	68.	-137.
6	1.714	-1.298	12156.	5889.	10894.	-12215.	12708.	-4089.	13863.	-553.	-724.	31.	58.	-111.
7	1.938	-.998	15232.	6473.	10468.	-7210.	17322.	-536.	12498.	-2057.	-547.	107.	191.	-99.
8	1.266	-1.016	14339.	3793.	9809.	-10207.	16326.	-28.	9960.	-1298.	-560.	21.	181.	-18.
9	1.281	-1.557	14787.	4435.	12698.	-11236.	16978.	-583.	11337.	-1714.	-827.	75.	84.	-31.
10	1.187	-1.856	15364.	5512.	13107.	-10499.	16348.	1655.	14324.	885.	-900.	-62.	90.	58.
11	1.348	-1.063	15736.	5859.	8432.	-14957.	18944.	2491.	15018.	3102.	-852.	-227.	282.	95.
12	1.438	-.547	13688.	5971.	6579.	-9615.	16809.	-584.	12835.	2193.	-615.	-101.	184.	-11.
13	1.379	-.527	14501.	3309.	5574.	-9168.	18025.	1115.	8885.	-1471.	-498.	6.	357.	58.
SIGMA								2456.		1900.		115.		93.

HARMONIC COMPONENTS: HUB MOMENTS HUB SHEAR FORCES

N	T1C	T1S	M2C	L2C	M4C	L4C	Y2C	X2C	Y4C	X4C
1	1.275	-1.055	-6252.	10883.	19611.	-2746.	984.	-58.	-128.	-386.
2	.773	-.814	-5222.	8394.	12353.	1148.	345.	-171.	75.	-369.
3	1.227	-1.162	-5896.	11988.	16032.	-2288.	897.	-103.	-126.	-418.
4	.675	-1.073	-150.	21808.	20981.	4725.	648.	-367.	78.	-288.
5	1.366	-1.001	-5451.	11156.	15771.	2612.	868.	-387.	0.	-417.
6	1.714	-1.298	-1370.	14998.	11334.	1137.	828.	-384.	-96.	-336.
7	1.938	-.998	-5698.	14883.	13624.	1594.	958.	-334.	11.	-415.
8	1.266	-1.016	-1681.	11581.	10865.	1021.	848.	-332.	-14.	-314.
9	1.281	-1.557	856.	15283.	15034.	3865.	838.	-454.	12.	-518.
10	1.187	-1.856	-936.	17484.	15412.	3160.	758.	-402.	-41.	-402.
11	1.348	-1.063	-5832.	12371.	13313.	-2648.	851.	-126.	-101.	-410.
12	1.438	-.547	-6371.	9867.	12237.	-2988.	698.	-118.	-127.	-402.
13	1.379	-.527	-8010.	7778.	10419.	-1055.	655.	89.	-64.	-368.

Table I. (Continued)

TEST 18 FREE GYRO MODE

VKT = 113.82 RPM = 232.9 MU = 0.50 P = 1.27

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (MEAN COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
1510.05	75710.75	287.87	-1036.55
11878.04	-27550.57	-107.21	516.93
13035.33	18765.68	-286.03	-186.81

#	T1C	T1S	Lsb	Msb	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	1.538	-1.440	1614.	3528.	7004.	15461.	-764.	1034.	-1146.	4388.	488.	-43.	-216.	-48.
2	1.454	-1.350	-3181.	24127.	4643.	27028.	-6829.	-326.	8154.	-2361.	340.	11.	-313.	31.
3	1.170	-1.401	-8709.	20220.	1786.	35384.	-13416.	-5249.	11537.	-3537.	605.	61.	-428.	4.
4	.334	-1.626	-10988.	26595.	1075.	43699.	-16296.	448.	19041.	1270.	684.	38.	-482.	-32.
5	1.547	-1.567	3214.	3828.	8065.	15367.	1075.	4418.	-1253.	6165.	461.	-67.	-146.	-38.
6	2.403	-1.086	11435.	-13732.	11438.	-4192.	11426.	-266.	-17937.	-6950.	382.	41.	8.	84.
7	2.193	-1.128	16977.	-22758.	15701.	-14430.	17528.	-381.	-26325.	1729.	325.	35.	81.	-48.
8	1.933	-1.380	3627.	807.	7742.	11788.	1811.	1757.	-4120.	-685.	447.	-28.	-165.	19.
9	2.145	-2.077	-15283.	-21755.	-16580.	-44227.	-14702.	-8175.	-25436.	-6522.	700.	48.	52.	82.
10	2.236	-2.744	-23175.	-25748.	-25176.	-4950.	-22278.	-180.	-34305.	2597.	833.	0.	88.	-58.
11	1.854	-1.355	5505.	5124.	8862.	15002.	1582.	4068.	768.	1629.	395.	-81.	-176.	48.
12	1.659	-.703	13876.	14328.	22758.	21487.	9936.	-2079.	11163.	-58.	286.	-5.	-357.	-27.
13	1.924	-.145	27886.	23065.	38750.	26350.	23065.	-448.	21603.	1706.	131.	8.	-436.	-34.
SIGMA								2388.		3781.		41.		46.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (3P COS COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
-9916.93	-1079.20	132.72	-365.42
8677.32	-2135.21	84.82	321.69
-3958.96	-3685.61	351.19	-68.84

#	T1C	T1S	Lsb	Msb	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	1.538	-1.440	7855.	-1187.	784.	-6501.	10741.	-2057.	3.	-234.	-181.	42.	227.	-88.
2	1.454	-1.350	4958.	-1534.	71.	-5327.	7108.	-1124.	-829.	-1760.	-68.	165.	195.	8.
3	1.170	-1.401	5287.	-1614.	2178.	-4588.	6814.	-845.	-317.	-1702.	-115.	141.	124.	20.
4	.334	-1.626	6180.	-22.	2317.	-13459.	4938.	-178.	5962.	3170.	-539.	-185.	75.	11.
5	1.547	-1.567	8546.	-1595.	354.	-5018.	11906.	-1515.	-85.	-622.	-137.	115.	534.	-42.
6	2.403	-1.086	11854.	-2656.	-1323.	-3352.	17644.	2361.	-2337.	-151.	-27.	18.	526.	46.
7	2.193	-1.128	11706.	-2474.	-4678.	-2189.	18927.	-1656.	-2578.	714.	11.	21.	656.	-17.
8	1.933	-1.380	9528.	-2492.	127.	-8425.	13663.	1306.	-165.	-44.	-229.	-42.	376.	27.
9	2.145	-2.077	13416.	-3925.	-240.	-16214.	19425.	2458.	1493.	-503.	-492.	-77.	548.	83.
10	2.238	-2.744	14473.	-2689.	1105.	-19822.	20356.	-48.	4862.	602.	-685.	-44.	535.	-5.
11	1.854	-1.355	7588.	-2673.	1170.	-6527.	10413.	-1158.	-573.	-929.	-154.	31.	257.	-65.
12	1.659	-.703	5788.	-1669.	-743.	-4423.	8830.	-405.	-454.	2001.	-110.	-134.	288.	-18.
13	1.924	-.145	5044.	-2612.	-2478.	2777.	8354.	962.	-4985.	-333.	216.	-29.	301.	36.
SIGMA								1627.		1341.		101.		44.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (3P SIN COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
2346.01	-8833.96	861.28	118.57
2071.14	8160.12	-505.26	-46.56
5180.20	-2828.17	71.83	262.30

#	T1C	T1S	Lsb	Msb	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	1.538	-1.440	2125.	6520.	10573.	3834.	-1511.	-325.	8275.	-1355.	-123.	100.	-330.	25.
2	1.454	-1.350	2652.	5287.	9783.	6132.	-432.	1236.	4911.	-1428.	36.	6.	-285.	27.
3	1.170	-1.401	488.	5574.	8387.	7911.	-2598.	-626.	4541.	-84.	95.	-76.	-316.	-14.
4	.334	-1.626	1763.	7053.	8384.	13869.	-2552.	1335.	4854.	-97.	222.	28.	-301.	32.
5	1.547	-1.567	3519.	6881.	10709.	2107.	551.	1283.	8380.	-652.	-131.	44.	-287.	56.
6	2.403	-1.086	6162.	5488.	12245.	-10012.	3478.	1642.	12514.	326.	-620.	-130.	-243.	34.
7	2.193	-1.128	6324.	6428.	12125.	-5872.	3411.	618.	13606.	-1600.	-652.	79.	-264.	52.
8	1.933	-1.380	1601.	8722.	10515.	3046.	-2503.	-1818.	11217.	1911.	-227.	-13.	-372.	-48.
9	2.145	-2.077	1648.	9567.	15771.	-2153.	-4575.	-773.	14725.	2047.	-469.	-62.	-565.	-48.
10	2.238	-2.744	846.	10338.	20069.	-860.	-7617.	-605.	15167.	64.	-468.	19.	-704.	-84.
11	1.854	-1.355	2687.	8795.	10411.	4133.	-431.	-210.	7384.	-774.	-106.	65.	-328.	-7.
12	1.659	-.703	1181.	8534.	8224.	6455.	-483.	-5044.	3432.	560.	-80.	47.	-243.	-58.
13	1.924	-.145	8675.	4851.	7747.	1828.	8198.	808.	8384.	749.	-132.	-13.	-43.	-35.
SIGMA								1381.		1182.		77.		51.

HARMONIC COMPONENTS: HUB MOMENTS HUB SHEAR FORCES

#	T1C	T1S	M4C	L2C	M2C	L0C	Y2C	X2C	Y0C	X0C
1	1.538	-1.440	757.	9588.	-754.	1233.	200.	-255.	77.	75.
2	1.454	-1.350	-165.	6010.	-661.	1058.	81.	-177.	115.	108.
3	1.170	-1.401	1339.	5588.	-1656.	1057.	15.	-217.	109.	96.
4	.334	-1.626	4357.	6326.	1705.	972.	-99.	-420.	173.	-119.
5	1.547	-1.567	-217.	10643.	134.	1463.	257.	-213.	66.	75.
6	2.403	-1.086	-2917.	14878.	580.	2665.	575.	-139.	-47.	108.
7	2.193	-1.128	-3005.	16167.	407.	2660.	654.	-128.	2.	138.
8	1.933	-1.380	1168.	12440.	-1334.	1225.	301.	-301.	74.	72.
9	2.145	-2.077	3034.	17075.	-1541.	2350.	508.	-528.	38.	37.
10	2.238	-2.744	6241.	17810.	-1378.	2543.	491.	-727.	43.	41.
11	1.854	-1.355	-11.	9188.	-951.	1224.	182.	-241.	75.	87.
12	1.659	-.703	14.	8031.	-487.	800.	170.	-178.	90.	84.
13	1.924	-.145	-5542.	7369.	807.	985.	216.	86.	84.	128.

Table I. (Concluded)

TEST 28 FREE GYRO MODE

VKT = 118.38 RPM = 148.6 MU = 0.79 P = 1.56

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (MEAN COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
7101.21	56288.01	78.02	-1388.65
6258.35	-13245.78	-2.91	385.78
13998.25	13552.79	-197.92	-77.56

N	T1C	T1S	Lab	Mab	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	2.791	-1.557	3782.	916.	[illegible]	10[illegible].	3729.	-8h.	-3330.	-1749.	377.	-2.	-93.	91.
2	2.036	-2.023	-2760.	7188.	13438.	18792.	-9886.	-1438.	1959.	-233.	464.	-8.	-648.	-209.
3	1.336	-1.955	-6644.	14688.	23579.	29532.	-15283.	-3579.	10819.	-1488.	514.	5%.	-891.	-87.
4	2.799	-1.820	2884.	2465.	6043.	12067.	1490.	2331.	-1768.	3529.	384.	-48.	-128.	9h.
5	3.649	-.987	8739.	-6330.	9205.	2549.	8528.	-7845.	-14238.	-5285.	555.	98.	-19.	-120.
6	3.606	-1.552	9436.	-6284.	10299.	2598.	9050.	1093.	-10167.	2950.	554.	-20.	-95.	-185.
7	2.644	-1.803	1126.	1756.	4854.	11998.	-917.	1050.	-2781.	61.	418.	-17.	-149.	72.
8	2.823	-2.014	-133.	-1097.	2687.	10108.	-1287.	2122.	-6068.	1439.	451.	-17.	-195.	51.
9	2.776	-2.169	-6949.	-6726.	-5384.	8774.	-7689.	-1792.	-10672.	-1214.	560.	41.	-88.	78.
10	2.732	-1.682	22h8.	-852.	5868.	9291.	1538.	870.	-5292.	-2988.	695.	2.	-64.	152.
11	2.532	-1.329	7h12.	8504.	12302.	16449.	5253.	892.	4998.	5.	518.	-16.	-198.	188.
12	2.696	-1.029	12834.	11544.	18929.	17938.	10148.	560.	8720.	1905.	256.	-18.	-246.	17.
13	2.837	-1.026	18198.	11233.	22868.	16884.	16128.	5628.	8745.	3745.	225.	-48.	-186.	21.
SIGMA								5096.		2484.		59.		195.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (3P COS COMPONENT)

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
-13298.62	-13061.10	855.55	990.87
7780.37	5388.06	-398.68	-311.01
-1889.68	-8695.57	128.63	574.55

N	T1C	T1S	Lab	Mab	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	2.791	-1.557	10145.	3673.	40242.	-7428.	8837.	-1306.	4562.	-855.	-444.	14.	-844.	-73.
2	2.036	-2.023	13369.	4981.	51125.	-286.	5536.	-676.	7213.	-2189.	-211.	6.	-749.	48.
3	1.336	-1.955	7410.	5978.	20474.	3486.	4662.	272.	6098.	863.	-11.	-8m.	-244.	4h.
4	2.799	-1.820	10026.	6512.	37142.	-4539.	11433.	-468.	22170.	327.	-534.	-44.	-749.	208.
5	3.649	-0.987	27737.	-258.	45736.	-23679.	28788.	5148.	18148.	1.36.	-842.	-224.	-720.	-24.
6	3.606	-1.552	25419.	4630.	48632.	-11662.	15178.	-2240.	11815.	-2054.	-652.	140.	-942.	98.
7	2.644	-1.803	43592.	6930.	51087.	-1106.	41174.	424.	20553.	-310.	-324.	40m.	-4408.	-241.
8	2.823	-2.014	24306.	8655.	21376.	-5084.	12362.	114.	14741.	1038.	-549.	-42.	-1063.	-39.
9	2.776	-2.169	25011.	8632.	52887.	-5663.	42714.	348.	44925.	466.	-272.	-85.	-4115.	3.
10	2.732	-1.682	22893.	6752.	45829.	-3885.	12772.	1841.	16315.	6022.	-535.	-96.	-917.	-92.
11	2.532	-1.329	14761.	5518.	28552.	-5191.	8406.	-314.	3048.	-1090.	-229.	95.	-976.	-49.
12	2.696	-1.029	12444.	2230.	23515.	-6597.	7358.	-1461.	9418.	1730.	-353.	-4.	-462.	-4.
13	2.837	-1.026	14797.	1077.	25061.	-6453.	10265.	-228.	4394.	-753.	-341.	105.	-414.	74.
SIGMA								4421.		4811.		82.		103.

HUB MOMENT DERIVATIVES DUE TO CYCLIC ANGLES (3P SIN COMPONE

ROW1:d(0) ROW2:d(T1C) ROW3:d(T1S)

d(Lh)	d(Mh)	d(Fx)	d(Fy)
11340.09	-28130.69	-168.34	880.12
-3725.61	9702.11	17.63	-436.11
6221.85	-784.82	-197.25	-81.56

N	T1C	T1S	Lab	Mab	L1c	M1c	Lh	d(Lh)	Mh	d(Mh)	Fx	d(Fx)	Fy	d(Fy)
1	2.791	-1.557	-3838.	10577.	4497.	15554.	-7497.	4242.	4377.	402.	483.	21.	-333.	-443.
2	2.036	-2.023	-6807.	9164.	-8177.	2465.	-8198.	4828.	4978.	758.	407.	-99.	56.	-102.
3	1.336	-1.955	-13584.	-1749.	-25600.	4491.	-9165.	-2368.	-4586.	1042.	458.	17.	484.	27.
4	2.733	-1.820	-8242.	8521.	-4803.	15933.	-9752.	45w.	w489.	-1774.	45w.	47.	-158.	94.
5	3.649	-0.987	-1968.	20418.	15865.	43018.	-9853.	-1549.	19435.	3732.	84.	1.	-734.	-62.
6	3.606	-1.552	-5472.	16028.	4821.	20382.	-10485.	859.	14099.	-1986.	174.	-47.	-492.	74.
7	2.644	-1.803	-8113.	8427.	-5581.	15186.	-9224.	498.	5443.	-1503.	474.	37.	-441.	49.
8	2.823	-2.014	-13475.	11561.	-9762.	16248.	-12559.	-653.	7946.	-329.	247.	8.	-183.	-3.
9	2.776	-2.169	-11159.	13264.	-8297.	20288.	-12407.	44.	20161.	4651.	281.	-48.	-144.	39.
10	2.732	-1.682	-11368.	12795.	-5840.	13946.	-11736.	-4437.	4653.	4944.	494.	73.	-441.	-47.
11	2.532	-1.329	-2114.	5773.	-1272.	6113.	-2446.	3871.	4738.	-750.	4.	-43.	-24.	64.
12	2.696	-1.029	-3910.	5532.	-225.	7918.	-5532.	-43w.	4477.	-2370.	85.	13.	-147.	64.
13	2.837	-1.026	-2590.	4449.	4472.	10534.	-5706.	-94.	4126.	-78.	87.	-17.	-244.	-8.
SIGMA								4841.		1751.		34.		66.

HARMONIC COMPONENTS: HUB MOMENTS HUB SHEAR FORCES

N	T1C	T1S	M4C	L2C	M2C	L4C	Y2C	X2C	Y4C	X4C
1	2.791	-1.557	8829.	9107.	533.	730.	-521.	-389.	-322.	-55.
2	2.036	-2.023	6758.	3757.	357.	1778.	-459.	-78.	-251.	-133.
3	1.336	-1.955	7132.	-1482.	-1033.	3124.	-390.	436.	-132.	-268.
4	2.799	-1.820	10961.	8868.	1309.	4171.	-481.	-326.	-234.	-188.
5	3.649	-0.987	10031.	19812.	148.	-24.	-404.	-829.	-318.	-115.
6	3.606	-1.552	11350.	14637.	465.	537.	-551.	-572.	-377.	-80.
7	2.644	-1.803	3888.	4308.	665.	4465.	-689.	-213.	-418.	-111.
8	2.823	-2.014	13627.	10139.	1073.	2223.	-685.	-369.	-398.	-180.
9	2.776	-2.169	13688.	11437.	1259.	1275.	-684.	-343.	-417.	-229.
10	2.732	-1.682	10458.	11213.	458.	1339.	-601.	-363.	-318.	-142.
11	2.532	-1.329	2768.	6573.	482.	1834.	-335.	-131.	-261.	-88.
12	2.696	-1.029	5829.	6017.	295.	4340.	-259.	-258.	-174.	-105.
13	2.837	-1.026	5067.	8198.	-653.	1868.	-239.	-282.	-172.	-8.

Table II. 33-Foot 3-Blade Rotor Reduced Experimental Nondimensional Hub and Swashplate Derivatives

TESTS 1 THRU 3

Vkt	mu	P	(Cl/sig)o	(Cm/sig)o	d(Cl/sig)/dT1c	d(Cm/sig)/dT1c	d(Cl/sig)/dT1s	d(Cm/sig)/dT1s
MEAN COEFFICIENTS								
49.38	0.489	2.06	-.822331E-03	.20654625-01	.13930516E00	-.3712745E00	.3502313E00	.1756456E00
48.04	0.772	3.05	.1019313E-02	.3740831E-01	.1520854150O	-.4054206E00	.3673916E00	.2716343E00
50.03	1.056	3.90	.9864167E-02	.6396488E-01	.2645796E-01	-.6342228E00	.6620405E00	.4038520E00
3P COSINE COEFFICIENTS								
49.38	0.489	2.06	.2815710E-02	-.2906145E-01	.11091044E00	.81041497E00	.5206538E00	-.2591084E00
48.04	0.772	3.05	.3066334E-01	-.6086305E-02	-.6110910E00	.3129415E00	.3098558E00	.3025365E00
50.03	1.056	3.90	.5616802E-01	-.2289059E-01	-.4012371E00	.3077963E00	.6416503E-01	.3131986E00
3P SINE COEFFICIENTS								
49.38	0.489	2.06	.3017952E-01	.85838095E-04	-.8168210E00	.1760812E00	.2500585E00	.5110583E00
48.04	0.772	3.05	.1406796E-01	.2654460E-01	-.3768498E00	-.4447447E00	-.4000158E00	.3514024E00
50.03	1.056	3.90	-.1235615E-01	.2740835E-01	-.1193093E00	-.9003068E00	-.8581268E00	.8005298E00
2P CONTRIBUTIONS TO 3P COSINE COEFFICIENTS								
49.38	0.489	2.06	.1450778E-02	-.300205E-01	.14845935E00	.81811755E00	.5196035E00	-.2541285E00
48.04	0.772	3.05	.2860401E-01	-.1007726-01	-.5279183E00	.3444567E00	.3301788E00	.3552471E00
50.03	1.056	3.90	.4178821E-01	-.5226715-02	-.7407719E00	.2135084E00	.4368409E00	.5856691E00
4P CONTRIBUTIONS TO 3P COSINE COEFFICIENTS								
49.38	0.489	2.06	.1364946E-02	.1590514E-03	-.2853095E-01	.1296516E-02	.8802847E-02	-.4062891E-02
48.04	0.772	3.05	.2059327E-02	.3990801E-02	-.8317366E-01	-.3240425E-01	-.2132355E-01	-.3701078E-02
50.03	1.056	3.90	.1437981E-01	-.1758285E-01	.2495348E00	.9419753E-01	-.3727099E00	-.2735070E00
2P CONTRIBUTIONS TO 3P SINE COEFFICIENTS								
49.38	0.489	2.06	.3002047E-01	.1450778E-02	-.8181176E00	.1484593E00	.2541285E00	.5196035E00
48.04	0.772	3.05	.1007736E-01	.2860401E-01	-.3444457E00	-.5279183E00	-.3552471E00	.3301788E00
50.03	1.056	3.90	.5226710E-02	.4178821E-01	-.2135068E00	-.7407719E00	-.5856691E00	.4368409E00
4P CONTRIBUTIONS TO 3P SINE COEFFICIENTS								
49.38	0.489	2.06	.1590514E-03	-.1364946E-02	.1296516E-02	.2853095E-01	-.4062891E-02	.8802847E-02
48.04	0.772	3.05	-.3990801E-02	-.2059336E-02	-.3240842E-01	.8317359E-01	-.3701078E-02	-.2132355E-01
50.03	1.056	3.90	-.1758285E-01	-.1437988E-01	.9419753E-01	-.2495348E00	-.2735070E00	-.3727099E00

MEAN COEFFICIENTS

Vkt	mu	P	(Ct/sig)o	d(Ct/sig)/dT1c	d(Ct/sig)/dT1s
49.38	0.489	2.06	.3598957E-01	-.1540560E00	.6011322E00
48.04	0.772	3.05	.5776814E-01	-.3960022E00	.1047337E01
50.03	1.056	3.90	.6085171E-01	-.6125939E00	.1582815E01

Table II. (Continued)

TESTS 4 THRU 6

Vkt	mu	P	(Cl/sig)o	(Cm/sig)o	d(Cl/sig)/dTlc	d(Cm/sig)/dTlc	d(Cl/sig)/dTls	d(Cm/sig)/dTls
MEAN COEFFICIENTS								
60.91	0.403	1.56	.2403012E-02	.1571660E-01	.13104104E00	-.3392717E00	.3343877[illegible]E00	.2026507[illegible]E00
59.96	0.800	2.61	.1141485E-01	.4026123E-01	.9716814E-01	-.5086013E00	.5409937[illegible]E00	.3173893[illegible]E00
60.02	1.113	3.47	.2607207E-01	.6748524E-01	.7787731E-02	-.7524728E00	.8112265[illegible]E00	.3964472[illegible]E00
3P COSINE COEFFICIENTS								
60.91	0.403	1.56	-.408979E-02	-.325534E-02	.16832628E00	.6175749E-01	-.1394675E-01	-.1259857E00
59.96	0.800	2.61	.4320544E-01	-.137803E-01	-.7062136E00	.4911924[illegible]E00	.5777495[illegible]E00	.5854807[illegible]E00
60.02	1.113	3.47	.6780578E-01	-.803605E-02	-.1087078E01	.6119708[illegible]E00	.4184193[illegible]E00	.4399[illegible]189E00
3P SINE COEFFICIENTS								
60.91	0.403	1.56	.3091964E-02	-.320355E-02	-.356098E-01	.13937217E00	.1265044[illegible]E00	.2490[illegible]45E-01
59.96	0.800	2.61	.1935536E-01	.4103969E-01	-.5356578E00	-.7275642E00	-.4847240E00	.6140[illegible]27E00
60.02	1.113	3.47	.4609790E-02	.4681265E-01	-.683284E-01	-.8338201E00	-.9508216E00	.6734537[illegible]E00
2P CONTRIBUTIONS TO 3P COSINE COEFFICIENTS								
60.91	0.403	1.56	-.364667E-02	-.317365E-02	.15414922E00	.4871866E-01	.5976870E-02	-.1258254E00
59.96	0.800	2.61	.4212256E-01	-.165673E-01	-.7168890E00	.5134251[illegible]E00	.5958799[illegible]E00	.5351[illegible]239E00
60.02	1.113	3.47	.5730922E-01	-.632292E-02	-.9604488E00	.3401495[illegible]E00	.5459365[illegible]E00	.6854[illegible]74E00
4P CONTRIBUTIONS TO 3P COSINE COEFFICIENTS								
60.91	0.403	1.56	-.443118E-03	-.816885E-04	.1417706E-01	.1301863E-01	-.179236E-01	.7393[illegible]2E-03
59.96	0.800	2.61	.1082879E-02	.278754[illegible]E-02	.1067518E-01	-.222327E-01	-.181304E-01	.5037[illegible]5E-01
60.02	1.113	3.47	.1049657E-01	-.171313E-02	-.1266287E00	.27182123E00	-.1275172E00	-.2454198E00
2P CONTRIBUTIONS TO 3P SINE COEFFICIENTS								
60.91	0.403	1.56	.3173652E-02	-.364667E-02	-.487187E-01	.15414922E00	.1258251[illegible]E00	.3976870E-02
59.96	0.800	2.61	.1656782E-01	.4212256E-01	-.5134251E00	-.7168890E00	-.5351[illegible]E00	.5958799[illegible]E00
60.02	1.113	3.47	.6322320E-02	.5730922E-01	-.3401496E00	-.9604488E00	-.6854017E00	.5459365[illegible]E00
4P CONTRIBUTIONS TO 3P SINE COEFFICIENTS								
60.91	0.403	1.56	-.816885E-04	.4431183E-03	.1301883E-01	-.141771E-01	.7393712E-03	-.179236E-01
59.96	0.800	2.61	.2787548E-02	-.108288E-02	-.222327E-01	-.106752E-01	.5037835E-01	-.181304E-01
60.02	1.113	3.47	-.171313E-02	-.1049666E-01	.27182123E00	.12662672E00	-.2454196E00	-.1275172E00

MEAN COEFFICIENTS

Vkt	mu	P	(Ct/sig)o	d(Ct/sig)/dTlc	d(Ct/sig)/dTls
60.91	0.403	1.56	.3668782E-02	.14441539E00	.49040510E00
59.96	0.800	2.61	.3026540E-01	-.1100786E01	.1743209[illegible]E01
60.02	1.113	3.47	.8484642E-01	-.2055961E01	.2618284[illegible]E01

Table II. (Continued)

TESTS 7 THRU 11

Vkt	mu	P	(Cl/sig)o	(Cm/sig)o	d(Cl/sig)/dTlc	d(Cm/sig)/dTlc	d(Cl/sig)/dTls	d(Cm/sig)/dTls
MEAN COEFFICIENTS								
69.19	0.492	1.64	.8058875E-03	.1999730E-01	.11860358E00	-.3836912E00	.28848023E00	.21240873E00
68.45	0.495	1.65	.5258335E-02	.2513957E-01	.14463278E00	-.3861839E00	.31902556E00	.21132041E00
69.30	0.784	2.28	.6093637E-02	.3706273E-01	.35297946-01	-.5221086E00	.39983543E00	.30855522E00
69.40	1.127	3.08	.5830754E-02	.6133706E-01	.16915915E00	-.7310211E00	.57585986E00	.36132541E00
68.66	1.962	5.16	.3631558E-01	.15860364E00	-.1133799E00	-.1336775E01	.86882577E00	.56541215E00
3P COSINE COEFFICIENTS								
69.19	0.492	1.64	-.602552E-02	-.537087E-02	.25009225E00	.9672309E-01	.4462440E-02	-.1921990E00
68.45	0.495	1.65	-.591741E-02	-.611911E-02	.20081683E00	.11253289E00	.7033680E-02	-.2157446E00
69.30	0.784	2.28	.3591573E-01	-.551838E-01	-.5659817E00	.13735553E01	.8960279E00	.1919446E-01
69.40	1.127	3.08	.5324599E-01	-.954553E-02	-.9408543E00	.43297638E00	.5032605E00	.5540965?E00
68.66	1.962	5.16	.7550972E-01	-.153007E-01	-.1098406E01	.2484045E-01	.8232624?E00	.1665416?E01
3P SINE COEFFICIENTS								
69.19	0.492	1.64	.4541574E-02	-.667506E-02	-.611440E-01	.25128920E00	.17007535E00	.2392260E-01
68.45	0.495	1.65	.5460545E-02	-.878616E-02	-.971595E-01	.26042222E00	.17258944E00	.7860886E-02
69.30	0.784	2.28	.4915649E-01	.3565371E-01	-.1226029E01	-.5975977E00	-.1210750E00	.10110564E01
69.40	1.127	3.08	.2100809E-01	.3939557E-01	-.5686783E00	-.6793195E00	-.6541374E00	.4370955?E00
68.66	1.962	5.16	.3885412E-02	.10435449E00	-.6897373E00	-.1910527E01	-.9133628E00	.43051059E00
2P CONTRIBUTIONS TO 3P COSINE COEFFICIENTS								
69.19	0.492	1.64	-.635029E-02	-.495622E-02	.25069072E00	.7893353E-01	.1719265E-01	-.1811372E00
68.45	0.495	1.65	-.735178E-02	-.578983E-02	.23061952E00	.10474619E00	.7447283E-02	-.1941670E00
69.30	0.784	2.28	.3578772E-01	-.521701E-01	-.5807897E00	.13011419E01	.9545451?E00	.7013474E-01
69.40	1.127	3.08	.4632068E-01	-.152768E-01	-.8100869E00	.50082735E00	.47017703E00	.6044168?E00
68.66	1.962	5.16	.8993211E-01	-.959308E-02	-.1504467E01	.35728888E00	.6268?950E00	.1289389?E01
4P CONTRIBUTIONS TO 3P COSINE COEFFICIENTS								
69.19	0.492	1.64	.3247707E-03	-.414647E-03	-.598473E-03	.1778956E-01	-.127302E-01	-.110618E-01
68.45	0.495	1.65	.1434375E-02	-.329283E-03	-.298027E-01	.7586702E-02	-.413603E-03	-.215770E-01
69.30	0.784	2.28	.1280095E-03	-.301364E-02	.1680738E-01	.7221332E-01	-.565153E-01	-.5094035-01
69.40	1.127	3.08	.6925310E-02	.5731279E-02	-.1307674E00	-.678509E-01	.3308552E-01	-.4972055-01
68.66	1.962	5.16	-.144224E-01	-.570766E-02	.40606024E00	-.3324484E01	.1963729?E00	.3760267?E00
2P CONTRIBUTIONS TO 3P SINE COEFFICIENTS								
69.19	0.492	1.64	.4956221E-02	-.635029E-02	-.703335E-01	.25069072E00	.18113716E00	.1719265E-01
68.45	0.495	1.65	.5789627E-02	-.735178E-02	-.1047462E00	.23061952E00	.19416701E00	.7447283E-02
69.30	0.784	2.28	.5217013E-01	.3578772E-01	-.1301142E01	-.5807897E00	-.701347E-01	.9545451?E00
69.40	1.127	3.08	.1527681E-01	.4632068E-01	-.5008273E00	-.8100869E00	-.6044169E00	.4701770?E00
68.66	1.962	5.16	.9593077E-02	.8993211E-01	-.3572889E00	-.1504467E01	-.1289590E01	.6268950E00
4P CONTRIBUTIONS TO 3P SINE COEFFICIENTS								
69.19	0.492	1.64	-.414647E-03	-.324771E-03	.1778956E-01	.5984727E-03	-.110618E-01	-.127302E-01
68.45	0.495	1.65	-.329283E-03	-.1434?7E-02	.7586702E-02	.2980269E-01	-.215770E-01	-.413603E-03
69.30	0.784	2.28	-.301364E-02	-.1280?5E-03	.7221332E-01	-.1020?0E-01	-.509403E-01	-.565153E-01
69.40	1.127	3.08	.5731279E-02	-.692?31E-02	-.678509E-01	.13076741E00	-.497205E-01	.3308552E-01
68.66	1.962	5.16	-.570766E-02	.1442238E-01	-.3324484E00	-.4060602E00	.37602677E00	.1963729?E00

MEAN COEFFICIENTS

Vkt	mu	P	(Ct/sig)o	d(Ct/sig)/dTlc	d(Ct/sig)/dTls
69.19	0.492	1.64	.4920821E-01	-.2439384E00	.6151601?E00
68.45	0.495	1.65	.5272924E-01	-.1440501E00	.6363165?E00
69.30	0.784	2.28	.6153701E-01	-.6444330E00	.1054504?E01
69.40	1.127	3.08	.8900808E-01	-.7845228E00	.1770046?E01
68.66	1.962	5.16	.1188032E00	-.1455323E01	.3522710?E01

Table II. (Continued)

TESTS 12 THRU 16

Vkt	mu	P	(Cl/sig)o	(Cm/sig)o	d(Cl/sig)/dTlc	d(Cm/sig)/dTlc	d(Cl/sig)/dTls	d(Cm/sig)/dTls
MEAN COEFFICIENTS								
80.59	0.399	1.35	.1032983E-02	.1482020E-01	.1725839SE00	-.3237962E00	.27733173E00	.21179042E00
82.76	0.528	1.53	.4411488E-02	.2064027E-01	.13769369E00	-.4057371E00	.36044270E00	.25751153E00
82.78	0.808	2.03	.1306252E-01	.3219403E-01	.4329397E-01	-.4297038E00	.47424461E00	.32496883E00
82.68	1.121	2.64	.2576824E-01	.6145846E-01	-.383594E-02	-.7503947E00	.73456505E00	.55250966E00
82.88	2.132	4.67	.7974569E-01	.16050164E00	.14115982E00	-.1020214E01	.17533829E01	.10963990E01
3P COSINE COEFFICIENTS								
80.59	0.399	1.35	-.139487E-02	-.275979E-03	.10502063E00	-.273652E-01	.1675531E-02	-.671289E-01
82.76	0.528	1.53	-.341148E-02	-.521593E-02	.17188970E00	.11277171E00	-.383848E-02	-.15609400E00
82.78	0.808	2.03	-.143435E-02	-.443642E-01	.32394019E00	.95095515E00	.7886587UE00	-.6862033E00
82.68	1.121	2.64	.5348713E-01	-.265565E-01	-.6523983E00	.74483511E00	.12304421E01	.693271U8E00
82.88	2.132	4.67	.8956504E-01	-.333784E-01	-.1372814E01	.48406192E00	.68619402E00	.21153485E01
3P SINE COEFFICIENTS								
80.59	0.399	1.35	.2863603E-02	-.363798E-02	-.547752E-01	.13436925E00	.7240516E-01	-.527112E-01
82.76	0.528	1.53	.4039486E-02	-.346338E-02	-.687776E-01	.15529825E00	.17443852E00	.1380465E-01
82.78	0.808	2.03	.5116858E-01	-.677517E-02	-.1098632E01	.36459302E00	.81762174E00	.67357172E00
82.68	1.121	2.64	.3147920E-01	.6263485E-01	-.8575025E00	-.1099714E01	-.5918903E00	.93064353E00
82.88	2.132	4.67	-.278148E-01	.13230582E00	-.4141759E00	-.1852068E01	-.1010692E01	.14216451E01
2P CONTRIBUTIONS TO 3P COSINE COEFFICIENTS								
80.59	0.399	1.35	-.251642E-02	-.156979E-02	.11969494E00	.1370500E-01	-.255179E-01	-.697670E-01
82.76	0.528	1.53	-.343743E-02	-.462771E-02	.16359401E00	.9077465E-01	.7983082E-02	-.1055683E00
82.78	0.808	2.03	-.410476E-02	-.477664E-01	.34426661E00	.10247926E01	.73110521E00	-.7429425E00
82.68	1.121	2.64	.5806099E-01	-.290179E-01	-.8760564E00	.80116883E00	.10805428E01	.6425807UE00
82.88	2.132	4.67	.11093543E00	-.278164E-02	-.1612441E01	.44911890E00	.10539195E01	.1562020IE01
4P CONTRIBUTIONS TO 3P COSINE COEFFICIENTS								
80.59	0.399	1.35	.1121556E-02	.1293812E-02	-.146743E-01	-.410702E-01	.2719325E-01	.2638136E-02
82.76	0.528	1.53	.2594308E-04	-.588220E-03	.8295758E-02	.2199706E-01	-.118216E-01	.8870251E-02
82.78	0.808	2.03	.2670410E-02	.3402188E-02	-.2032684E-01	-.738395E-01	.5753349E-01	.7467924E-01
82.68	1.121	2.64	-.457386E-02	.2461337E-02	.2236576IE00	-.563337E-01	.14989950E00.	.5069058E-01
82.88	2.132	4.67	-.213704E-01	-.305966E-01	.23962710E00	.3494302E-0.	-.3677255E00	.5513284IE00
2P CONTRIBUTIONS TO 3P SINE COEFFICIENTS								
80.59	0.399	1.35	.1569791E-02	-.251642E-02	-.137050E-01	.11969494E00	.6976702E-01	-.255179E-01
82.76	0.528	1.53	.4627706E-02	-.343743E-02	-.907747E-01	.16359401E00	.16556826E00	.7983082E-02
82.78	0.808	2.03	.4776639E-01	-.410476E-02	-.1024793E01	.34426661E00	.74234250E00	.73110521E00
82.68	1.121	2.64	.2901787E-01	.5806099E-01	-.8011683E00	-.8760564E00	-.6425807E00	.10805428E01
82.88	2.132	4.67	.2781839E-02	.11093543E00	-.4491189E00	-.1612441E01	-.1562020E01	.10539195E01
4P CONTRIBUTIONS TO 3P SINE COEFFICIENTS								
80.59	0.399	1.35	.1293812E-02	-.112156E-02	-.410702E-01	.1467431E-01	.2638138E-02	.2719325E-01
82.76	0.528	1.53	-.588220E-03	-.259491E-04	.2199706E-01	-.829576E-02	.8870251E-02	-.1182162E-01
82.78	0.808	2.03	.3402188E-02	-.267041E-02	-.738395E-01	.2032641E-01	.7467924E-01	.5753349E-01
82.68	1.121	2.64	.2461337E-02	.4573860E-02	-.563337E-01	-.2236576E00	.5069058E-01	.1498395UE00
82.88	2.132	4.67	-.305966E-01	.2137039E-01	.3494302E-01	-.2396271E00	.55132841E00	-.3677255E00

MEAN COEFFICIENTS

Vkt	mu	P	(Ct/sig)o	d(Ct/sig)/dTlc	d(Ct/sig)/dTls
80.59	0.399	1.35	.3048290E-01	-.1284578E00	.63043114E00
82.76	0.528	1.53	.1739906E-01	-.2577735E-01	.48767308E00
82.78	0.808	2.03	-.140577E-02	.2706529UE00	.81314331E00
82.68	1.121	2.64	.2261591E-01	-.3202319E00	.2102665JE01
82.88	2.132	4.67	.26031450E00	-.2401947E01	.42039213E01

Table II. (Continued)

TESTS 13 THRU 16 (CONTINUED)

Vkt	mu	P	(Cl/sig)o	(Cm/sig)o	d(Cl/sig)/dTlc	d(Cm/sig)/dTlc	d(Cl/sig)/dTls	d(Cm/sig)/dTls
MEAN COEFFICIENTS								
82.76	0.528	1.53	-.593986E-02	.1324911E-01	.31034385E00	-.1251287E00	.6006791E-01	.42009600E00
82.78	0.808	2.03	-.674396E-02	.2350217E-01	.31970269E00	-.1958319E00	.8773512E-01	.56018172E00
82.68	1.121	2.64	-.912804E-02	.4247059E-01	.46083467E00	-.4111039E00	.1918625JE00	.88995326E00
82.88	2.132	4.67	.5556752E-02	.7117593E-01	.83995364E00	-.4547941E00	.95296724E00	.27034224E01
3P COSINE COEFFICIENTS								
82.76	0.528	1.53	.2738794E-02	-.337690E-02	-.1084595E00	.9707818E-01	.4775926E-01	-.966285E-01
82.78	0.808	2.03	.5358576E-02	-.204385E-01	-.1102355E00	.51511124E00	.20637954E00	-.1069179E00
82.68	1.121	2.64	.1994442E-01	.3584458E-02	-.4988940E00	-.133208E-02	.9387960E-01	.47802479E00
82.88	2.132	4.67	-.692035E-01	.15136940E00	.10408667E01	.16041083E01	-.5080818E01	.17047951E01
3P SINE COEFFICIENTS								
82.76	0.528	1.53	.1566076E-02	-.170365E-02	-.815659E-01	.9904531E-01	-.591546E-01	.7601577E-01
82.78	0.808	2.03	.1691216E-02	.8090320E-02	-.1128633E00	-.499279E-01	-.1066552E00	.38606707E00
82.68	1.121	2.64	-.918561E-02	.2917099E-01	-.244214E-01	-.4432640E00	-.3274368E00	.15724833E00
82.88	2.132	4.67	.1034844E-01	.19708266E00	.18723729E01	-.3366207E01	.47922334E00	.46082153E01
2P CONTRIBUTIONS TO 3P COSINE COEFFICIENTS								
82.76	0.528	1.53	.5175703E-03	-.247149E-02	-.470708E-02	.8932204E-01	.6188751E-01	-.187370E-01
82.78	0.808	2.03	.6724448E-02	-.110649E-01	-.800817E-01	.31398727E00	.29623330E00	-.131589E-03
82.68	1.121	2.64	.2455771E-01	.8885036E-02	-.4710790E00	.1154465E-01	.12556397E00	.40275081E00
82.88	2.132	4.67	.6393959E-01	.7051048E-01	-.1162670E01	-.1341323E00	-.2363012E00	.6127848eE00
4P CONTRIBUTIONS TO 3P COSINE COEFFICIENTS								
82.76	0.528	1.53	.2221224E-02	-.905411E-03	-.1037524E00	.7756137E-02	-.141283E-01	-.778916E-01
82.78	0.808	2.03	-.136587E-02	-.937354E-02	-.301538E-01	.20112397E00	-.838538E-01	-.1067865E00
82.68	1.121	2.64	-.461329E-02	-.300578E-03	-.278150E-01	-.128767E-01	-.316844E-01	.7529398E-01
82.88	2.132	4.67	-.1331431E00	.8085892E-01	.22035370E01	.17382406E01	-.4844517E01	.10920082E01
2P CONTRIBUTIONS TO 3P SINE COEFFICIENTS								
82.76	0.528	1.53	.2471487E-02	.5175703E-03	-.893220E-01	-.470708E-02	.1873697E-01	.6188751E-01
82.78	0.808	2.03	.1106485E-01	.6724448E-02	-.5139073E00	-.800817E-01	.1513892E-03	.29623330E00
82.68	1.121	2.64	-.888504E-02	.2455771E-01	-.115447E-01	-.4710790E00	-.4027508E00	.12556397E00
82.88	2.132	4.67	-.705105E-01	.6393959E-01	.13413231E00	-.1162670E01	-.6127849E00	-.2363012E00
4P CONTRIBUTIONS TO 3P SINE COEFFICIENTS								
82.76	0.528	1.53	-.905411E-03	-.222122E-02	.7756137E-02	.10375239E00	-.778916E-01	-.141283E-01
82.78	0.808	2.03	-.937364E-02	.1365872E-02	.20112397E00	.3015381E-01	-.1067865E00	-.838538E-01
82.68	1.121	2.64	-.300578E-03	.4613288E-02	-.128767E-01	.2781500E-01	.7529398E-01	-.316844E-01
82.88	2.132	4.67	.8085892E-01	.13314307E00	.17382406E01	-.2203537E01	.10920082E01	-.4844517E01

Table II. (Continued)

TESTS 17 THRU 18

Vkt	mu	P	(Cl/sig)o	(Cm/sig)o	d(Cl/sig)/dTlc	d(Cm/sig)/dTlc	d(Cl/sig)/dTls	d(Cm/sig)/dTls
MEAN COEFFICIENTS								
81.67	0.405	1.35	.2784783E-02	.1360329E-01	.16132172E00	-.3080573E00	.31693537E00	.21583347E00
81.26	0.521	1.53	.4357254E-02	.1926430E-01	.13745586E00	-.3665135E00	.34294055E00	.23415442E00
3P COSINE COEFFICIENTS								
81.67	0.405	1.35	-.171150E-02	-.510068E-03	.9539421E-01	-.283891E-01	-.312629E-01	-.749150E-01
81.26	0.521	1.53	-.199379E-02	-.514499E-02	.13954450E00	.10008104E00	.8515966E-02	-.1321326E00
3P SINE COEFFICIENTS								
81.67	0.405	1.35	.3232018E-02	-.311783E-02	-.577697E-01	.10634303E00	.9400342E-01	-.711331E-01
81.26	0.521	1.53	.5476229E-02	-.255196E-02	-.1046130E00	.12991769E00	.19142640E00	.2688910E-01
2P CONTRIBUTIONS TO 3P COSINE COEFFICIENTS								
81.67	0.405	1.35	-.241467E-02	-.187104E-02	.10086862E00	.1469033E-01	-.511980E-01	-.844592E-01
81.26	0.521	1.53	-.227288E-02	-.531061E-02	.13473110E00	.10234704E00	.1770253E-01	-.1617795E00
4P CONTRIBUTIONS TO 3P COSINE COEFFICIENTS								
81.67	0.405	1.35	.7031666E-03	.1360975E-02	-.547441E-02	-.430794E-01	.1993512E-01	.9544226E-02
81.26	0.521	1.53	.2790872E-03	.1656187E-03	.4813407E-02	-.226599E-02	-.918657E-02	.2964689E-01
2P CONTRIBUTIONS TO 3P SINE COEFFICIENTS								
81.67	0.405	1.35	.1871043E-02	-.241467E-02	-.1469033E-01	.10086862E00	.8445920E-01	-.511980E-01
81.26	0.521	1.53	.5310610E-02	-.227288E-02	-.1023470E00	.13473110E00	.16177951E00	.1770253E-01
4P CONTRIBUTIONS TO 3P SINE COEFFICIENTS								
81.67	0.405	1.35	.1360975E-02	-.703167E-03	-.430794E-01	.5474406E-02	.9544226E-02	.1993512E-01
81.26	0.521	1.53	.1656187E-03	-.279087E-03	-.226599E-02	-.461341E-02	.2964689E-01	-.918657E-02

MEAN COEFFICIENTS

Vkt	mu	P	(Ct/sig)o	d(Ct/sig)/dTlc	d(Ct/sig)/dTls
81.67	0.405	1.35	.1604033E-01	.28038137E00	.52087746E00
81.26	0.521	1.53	.2015156E-02	.39256369E00	.57774608E00

Table II. (Continued)

TESTS 17 THRU 18 (CONTINUED)

Vkt	mu	P	(Cl/sig)o	(Cm/sig)o	d(Cl/sig)/dTlc	d(Cm/sig)/dTlc	d(Cl/sig)/dTls	d(Cm/sig)/dTls
MEAN COEFFICIENTS								
81.67	0.405	1.35	-.579334E-02	.7743779E-02	.32906683E00	-.320296E-01	.5214247E-01	.34483362E00
81.26	0.521	1.53	-.815538E-02	.9859414E-02	.36623778E00	-.626223E-01	.3792717E-01	.36824829E00
3P COSINE COEFFICIENTS								
81.67	0.405	1.35	.7220406E-03	.4618338E-03	-.237319E-02	.1241689E-01	.4810804E-01	.1564613E-01
81.26	0.521	1.53	.1433576E-02	.2151351E-03	-.601457E-01	.3059647E-01	.1177441E-01	.2015235E-01
3P SINE COEFFICIENTS								
81.67	0.405	1.35	.7298809E-03	.9578392E-03	-.363183E-01	-.225708E-01	.5771948E-02	.4124273E-01
81.26	0.521	1.53	-.822009E-03	.1126804E-02	.2303934E-01	-.144350E-01	-.486685E-01	.6024476E-01
2P CONTRIBUTIONS TO 3P COSINE COEFFICIENTS								
81.67	0.405	1.35	.8399399E-03	-.134024E-03	-.124720E-01	.2436762E-01	.4467538E-01	.4937092E-02
81.26	0.521	1.53	.1280190E-02	.5185720E-03	-.372903E-01	.3778565E-02	.3600958E-01	.3441042E-01
4P CONTRIBUTIONS TO 3P COSINE COEFFICIENTS								
81.67	0.405	1.35	-.117899E-03	.5958573E-03	.1003879E-01	-.119507E-01	.3432656E-02	.1070904E-01
81.26	0.521	1.53	.1535857E-03	-.303437E-03	-.228554E-01	.2681791E-01	-.242352E-01	-.142581E-01
2P CONTRIBUTIONS TO 3P SINE COEFFICIENTS								
81.67	0.405	1.35	.1340235E-03	.8399399E-03	-.243676E-01	-.124720E-01	-.493709E-02	.4467538E-01
81.26	0.521	1.53	-.518572E-03	.1280190E-02	-.377857E-02	-.372903E-01	-.344104E-01	.3600958E-01
4P CONTRIBUTIONS TO 3P SINE COEFFICIENTS								
81.67	0.405	1.35	.5958573E-03	.1178993E-03	-.119507E-01	-.100988E-01	.1070904E-01	.3432656E-02
81.26	0.521	1.53	-.303437E-03	-.153386E-03	.2681791E-01	.2285537E-01	-.142581E-01	-.242352E-01

Table II. (Continued)

TESTS 19 THRU 22

Vkt	mu	P	(Cl/sig)o	(Cm/sig)o	d(Cl/sig)/dTlc	d(Cm/sig)/dTlc	d(Cl/sig)/dTls	d(Cm/sig)/dTls
MEAN COEFFICIENTS								
89.80	0.494	1.41	-.982637E-04	.1952910E-01	.15746173E00	-.3982846E00	.25077321E00	.25116561E00
89.37	1.073	2.39	.1356343E-01	.6393240E-01	.2718448E-01	-.7798494E00	.59056655E00	.59511967E00
89.56	1.081	2.40	.2067958E-01	.6890626E-01	.10028904E00	-.6468488E00	.62772764E00	.65849057E00
88.28	2.021	4.20	.3331621E-01	.15553596E00	.10479588E00	-.1192288E01	.10606911E01	.86400222E00
3P COSINE COEFFICIENTS								
89.80	0.494	1.41	-.376445E-02	-.219655E-02	.21503480E00	-.201524E-01	-.774065E-02	-.1659165E00
89.37	1.073	2.39	.7229704E-01	-.709646E-01	-.1193450E01	.16816868E01	.11659402E01	.12626252E00
89.56	1.081	2.40	.7589960E-01	-.766155E-01	-.9168134E00	.14102538E01	.13422676E01	.12673297E00
88.28	2.021	4.20	.10866685E00	-.905624E-01	-.1435267E01	.98000980E00	.59018818E00	.10959441E01
3P SINE COEFFICIENTS								
89.80	0.494	1.41	.5313607E-02	-.591003E-02	-.1044343E00	.21456102E00	.19148642E00	-.1035563E00
89.37	1.073	2.39	.7329647E-01	.7122198E-01	-.1596933E01	-.1236565E01	-.1651094E00	.12775729E01
89.56	1.081	2.40	.6487887E-01	.7246593E-01	-.1213527E01	-.8420695E00	-.1916178E00	.15084219E01
88.28	2.021	4.20	-.221607E-01	.3352474E-01	-.2378126E00	-.1709971E01	-.1179223E01	.10599143E01
2P CONTRIBUTIONS TO 3P COSINE COEFFICIENTS								
89.80	0.494	1.41	-.483724E-02	-.375508E-02	.21479791E00	.4214096E-01	-.556485E-01	-.1787015E00
89.37	1.073	2.39	.7175951E-01	-.751306E-01	-.1218007E01	.16393396E01	.12207566E01	.14569537E00
89.56	1.081	2.40	.7418276E-01	-.787472E-01	-.8794415E00	.13118905E01	.14253448E01	.15917556E00
88.28	2.021	4.20	.10109580E00	-.342008E-01	-.1572619E01	.62191121E00	.82505123E00	.11375836E01
4P CONTRIBUTIONS TO 3P COSINE COEFFICIENTS								
89.80	0.494	1.41	.1072793E-02	.1558526E-02	.2368897E-03	-.622934E-01	.4790780E-01	.1278493E-01
89.37	1.073	2.39	.5375251E-03	-.185408E-02	.1855752E-01	.4234712E-01	-.568164E-01	-.194134E-01
89.56	1.081	2.40	.1716834E-02	-.586831E-02	-.3757129E-01	.9836330E-01	-.830772E-01	-.324424E-01
88.28	2.021	4.20	.7571057E-02	-.5[illegible]616E-01	.13735203E00	.37409859E00	-.2348631E00	-.416396E-01
2P CONTRIBUTIONS TO 3P SINE COEFFICIENTS								
89.80	0.494	1.41	.3755081E-02	-.483724E-02	-.421410E-01	.21479791E00	.17870148E00	-.556485E-01
89.37	1.073	2.39	.7513055E-01	.7175951E-01	-.1639340E01	-.1218007E01	-.1456960E00	.12207566E01
89.56	1.081	2.40	.7074719E-01	.7418276E-01	-.1311890E01	-.8794415E00	-.1591754E00	.14253448E01
88.28	2.021	4.20	.3420082E-01	.10109580E00	-.6129112E00	-.1572619E01	-.1137584E01	.82505123E00
4P CONTRIBUTIONS TO 3P SINE COEFFICIENTS								
89.80	0.494	1.41	.1558526E-02	-.107279E-02	-.622934E-01	-.236890E-03	.1278493E-01	.4790780E-01
89.37	1.073	2.39	-.183408E-02	-.537525E-03	.4234712E-01	-.185575E-01	-.194134E-01	-.568164E-01
89.56	1.081	2.40	-.586831E-02	-.171633E-02	.9836330E-01	.3737193E-01	-.324424E-01	-.830772E-01
88.28	2.021	4.20	-.563616E-01	-.757106E-02	.37409859E00	-.1373521E00	-.416396E-01	-.2348631E00

MEAN COEFFICIENTS

Vkt	mu	P	(Ct/sig)o	d(Ct/sig)/dTlc	d(Ct/sig)/dTls
89.80	0.494	1.41	.3561616E-01	-.955088E-01	.63395010E00
89.37	1.073	2.39	.6416470E-01	-.377823E-01	.10023455E01
89.56	1.021	2.40	.12794817E00	-.7174280E00	.18078376E01
88.28	2.021	4.20	.17669091E00	-.1540536E01	.37546071E01

Table II. (Continued)

TESTS 23 THRU 24

Vkt	mu	P	(Cl/sig)o	(Cm/sig)o	d(Cl/sig)/dTlc	d(Cm/sig)/dTlc	d(Cl/sig)/dTls	d(Cm/sig)/dTls
MEAN COEFFICIENTS								
101.91	0.411	1.25	.2085215E-02	.1330827E-01	.18552825E00	-.3495957E00	.30187152E00	.20343816E00
101.87	0.513	1.36	.6816802E-02	.1858447E-01	.11838748E00	-.3579674E00	.33170349E00	.27461851E00
3P COSINE COEFFICIENTS								
101.91	0.411	1.25	-.130437E-02	-.558627E-03	.8492998E-01	-.551789E-02	-.413108E-01	-.262348E-01
101.87	0.513	1.36	-.317332E-04	-.310845E-02	.8597856E-01	.2166725E-01	.5563402E-02	-.1252814E00
3P SINE COEFFICIENTS								
101.91	0.411	1.25	.8029966E-03	-.107463E-02	-.692323E-02	.6520932E-01	.5619959E-01	-.291356E-01
101.87	0.513	1.36	.2285543E-02	-.373636E-02	-.640124E-01	.13971493E00	.9665475E-01	-.600944E-01
2P CONTRIBUTIONS TO 3P COSINE COEFFICIENTS								
101.91	0.411	1.25	-.118950E-02	-.680812E-03	.7506965E-01	.7026987E-03	-.352262E-01	-.412172E-01
101.87	0.513	1.36	-.188405E-02	-.269700E-02	.12284674E00	.4283980E-01	-.272655E-01	-.1109681E00
4P CONTRIBUTIONS TO 3P COSINE COEFFICIENTS								
101.91	0.411	1.25	-.114869E-03	.1221850E-03	.9860331E-02	-.622059E-02	-.609059E-02	.1498241E-01
101.87	0.513	1.36	.1852315E-02	-.411454E-03	-.36[illegible]682E-01	-.211726E-01	.3282889E-01	-.143133E-01
2P CONTRIBUTIONS TO 3P SINE COEFFICIENTS								
101.91	0.411	1.25	.6808116E-03	-.118950E-02	-.702693E-03	.7506965E-01	.4121718E-01	-.352262E-01
101.87	0.513	1.36	.2696997E-02	-.188405E-02	-.428398E-01	.12284674E00	.11096809E00	-.272655E-01
4P CONTRIBUTIONS TO 3P SINE COEFFICIENTS								
101.91	0.411	1.25	.1221850E-03	.1148688E-03	-.622059E-02	-.986033E-02	.1498241E-01	-.609059E-02
101.87	0.513	1.36	-.411454E-03	-.185231E-02	-.211726E-01	.3686818E-01	-.143133E-01	.3282889E-01

MEAN COEFFICIENTS

Vkt	mu	P	(Ct/sig)o	d(Ct/sig)/dTlc	d(Ct/sig)/dTls
101.91	0.411	1.25	.3098068E-01	.9547199E-01	.56054796E00
101.87	0.513	1.36	.2960140E-01	.1714281E-01	.48878678E00

Table II. (Continued)

TESTS 23 THRU 24 (CONTINUED)

Vkt	mu	P	(Cl/sig)o	(Cm/sig)o	d(Cl/sig)/dTlc	d(Cm/sig)/dTlc	d(Cl/sig)/dTls	d(Cm/sig)/dTls
MEAN COEFFICIENTS								
101.91	0.411	1.25	-.413447E-02	.6438055E-02	.33162664E00	-.172915E-02	.1934517E-01	.32668542E00
101.87	0.513	1.36	-.464446E-02	.1127979E-01	.31328449E00	-.379679E-01	-.311947E-01	.3927400JE00
3P COSINE COEFFICIENTS								
101.91	0.411	1.25	-.419971E-03	-.821873E-03	.1777830E-01	.4163380E-02	.1097364E-01	-.421822E-01
101.87	0.513	1.36	-.826746E-03	-.158834E-02	.5192411E-01	.5218640E-01	.5166182E-01	-.365628E-01
3P SINE COEFFICIENTS								
101.91	0.411	1.25	.9979679E-03	-.463628E-03	-.268157E-01	.1853935E-01	.3793488E-01	.4493540E-02
101.87	0.513	1.36	.1483047E-02	.1170537E-02	-.583589E-01	.1529134E-01	.3107228E-01	.7963140E-01
2P CONTRIBUTIONS TO 3P COSINE COEFFICIENTS								
101.91	0.411	1.25	-.441800E-03	-.909920E-03	.1815883E-01	.1548356E-01	.7733590E-02	-.400585E-01
101.87	0.513	1.36	.1718955E-03	-.153560E-02	.3360772E-01	.5527264E-01	.6574664E-01	-.338176E-01
4P CONTRIBUTIONS TO 3P COSINE COEFFICIENTS								
101.91	0.411	1.25	.2182872E-04	.8804737E-04	-.380524E-03	-.113262E-01	.3[illegible]0050E-02	-.212366E-02
101.87	0.513	1.36	-.998642E-03	-.526444E-04	.1831633E-01	-.308625E-02	-.140848E-01	-.274527E-02
2P CONTRIBUTIONS TO 3P SINE COEFFICIENTS								
101.91	0.411	1.25	.3099205E-03	-.441800E-03	-.154890E-01	.1815883E-01	.4005854E-01	.7733590E-02
101.87	0.513	1.36	.1535691E-02	.1718955E-03	-.552720E-01	.3360772E-01	.3387755E-01	.6574664E-01
4P CONTRIBUTIONS TO 3P SINE COEFFICIENTS								
101.91	0.411	1.25	.8804737E-04	-.218287E-04	-.113262E-01	.3805240E-03	-.212366E-02	.3240050E-02
101.87	0.513	1.36	-.526444E-04	.9986418E-03	-.308625E-02	-.183164E-01	-.274527E-02	-.140848E-01

Table II. (Continued)

TESTS 25 THRU 26

Vkt	mu	P	(Cl/sig)o	(Cm/sig)o	d(Cl/sig)/dTlc	d(Cm/sig)/dTlc	d(Cl/sig)/dTls	d(Cm/sig)/dTls
MEAN COEFFICIENTS								
102.93	0.413	1.25	.3121854E-03	.1418644E-01	.19402478E00	-.2721609E00	.30131444E00	.31188824E00
102.85	0.521	1.36	.2500684E-02	.2198156E-01	.15796311E00	-.4092504E00	.3227658eE00	.29630681E00
3P COSINE COEFFICIENTS								
102.93	0.413	1.25	-.148194E-02	.3728031E-03	.7179691E-01	-.209011E-01	-.703061E-01	.2218105E-02
102.85	0.521	1.36	-.154243E-02	-.112702E-02	.14046700E00	-.305944E-01	-.107454E-01	-.959237E-01
3P SINE COEFFICIENTS								
102.93	0.413	1.25	-.553719E-05	-.914342E-03	.3539424E-01	.3513376E-01	.5355704E-01	-.543300E-01
102.85	0.521	1.36	.4322153E-02	-.355463E-02	-.739731E-01	.12880735E00	.12375083E00	-.765559E-01
2P CONTRIBUTIONS TO 3P COSINE COEFFICIENTS								
102.93	0.413	1.25	-.119814E-02	.1891701E-03	.5346533E-01	-.281477E-01	-.623180E-01	-.256095E-01
102.85	0.521	1.36	-.254853E-02	-.272459E-02	.13463717E00	.2168934E-01	-.436497E-01	-.1098375E00
4P CONTRIBUTIONS TO 3P COSINE COEFFICIENTS								
102.93	0.413	1.25	-.283799E-03	.1836329E-03	.1833157E-01	.7246572E-02	-.798802E-02	.2788757E-01
102.85	0.521	1.36	.1006098E-02	.1597565E-02	.5829826E-02	-.522838E-01	.3290423E-01	.1391355E-01
2P CONTRIBUTIONS TO 3P SINE COEFFICIENTS								
102.93	0.413	1.25	-.189170E-03	-.119814E-02	.2814767E-01	.5346533E-01	.2566947E-01	-.623180E-01
102.85	0.521	1.36	.2724588E-02	-.254853E-02	-.216393E-01	.13463717E00	.1098372eE00	-.436497E-01
4P CONTRIBUTIONS TO 3P SINE COEFFICIENTS								
102.93	0.413	1.25	.1836329E-03	.2837989E-03	.7246572E-02	-.183316E-01	.2788757E-01	-.798802E-02
102.85	0.521	1.36	.1597565E-02	-.100610E-02	-.522838E-01	-.582983E-02	.1391355E-01	.3290423E-01

MEAN COEFFICIENTS

Vkt	mu	P	(Ct/sig)o	d(Ct/sig)/dTlc	d(Ct/sig)/dTls
102.93	0.413	1.25	.3729367E-01	.10526284E00	.73705962E00
102.85	0.521	1.36	.3440005E-01	.18392281E00	.82425862E00

Table II. (Continued)

TESTS 25 THRU 26 (CONTINUED)

Vkt	mu	P	(Cl/sig)o	(Cm/sig)o	d(Cl/sig)/dTlc	d(Cm/sig)/dTlc	d(Cl/sig)/dTls	d(Cm/sig)/dTls
MEAN COEFFICIENTS								
102.93	0.413	1.25	-.304865E-02	.7974801E-02	.29986795E00	-.281317E-01	.5906746E-01	.42081827E00
102.85	0.521	1.36	-.479345E-02	.1246010E-01	.35499679E00	-.1268659E00	.8961197E-01	.38780461E00
3P COSINE COEFFICIENTS								
102.93	0.413	1.25	.2900053E-03	-.902118E-03	.3086245E-02	.1006556E-01	.3357067E-01	-.337964E-01
102.85	0.521	1.36	.6159413E-03	-.372193E-03	-.200791E-02	.3110469E-01	.4758927E-01	.1308727E-02
3P SINE COEFFICIENTS								
102.93	0.413	1.25	.1038997E-02	.4247175E-03	-.231666E-01	.3760885E-02	.2858867E-01	.4661528E-01
102.85	0.521	1.36	.1523974E-02	.6223557E-03	-.509955E-01	-.766412E-02	.6713951E-02	.2422042E-01
2P CONTRIBUTIONS TO 3P COSINE COEFFICIENTS								
102.93	0.413	1.25	.3573614E-03	-.970558E-03	.6423565E-02	.1661607E-01	.4009298E-01	-.311925E-01
102.85	0.521	1.36	.6191485E-03	-.948083E-03	-.483602E-02	.4105012E-01	.3590485E-01	-.270261E-02
4P CONTRIBUTIONS TO 3P COSINE COEFFICIENTS								
102.93	0.413	1.25	-.673561E-04	.6843928E-04	-.333732E-02	-.655051E-02	-.652230E-02	-.260384E-02
102.85	0.521	1.36	-.320721E-05	.5758902E-03	.2828106E-02	-.994543E-02	.1168443E-01	.4011339E-02
2P CONTRIBUTIONS TO 3P SINE COEFFICIENTS								
102.93	0.413	1.25	.3705577E-03	.3573614E-03	-.166161E-01	.6423565E-02	.3119252E-01	.4009298E-01
102.85	0.521	1.36	.9480833E-03	.6191485E-03	-.410501E-01	-.483602E-02	.2702612E-02	.3590485E-01
4P CONTRIBUTIONS TO 3P SINE COEFFICIENTS								
102.93	0.413	1.25	.6843928E-04	.6755607E-04	-.655051E-02	.3337320E-02	-.260384E-02	-.652230E-02
102.85	0.521	1.36	.5758902E-03	.3207213E-05	-.994543E-02	-.282811E-02	.4011339E-02	.1168443E-01

Table II. (Concluded)

TESTS 27 THRU 29

Vkt	mu	P	(Cl/sig)o	(Cm/sig)o	d(Cl/sig)/dT1c	d(Cm/sig)/dT1c	d(Cl/sig)/dT1s	d(Cm/sig)/dT1s
MEAN COEFFICIENTS								
120.54	0.365	1.18	-.188269E-02	.9242765E-02	.24079656E00	-.2287302E00	.19535350E00	.25772100E00
119.92	0.503	1.27	.3628437E-03	.1819416E-01	.17729665E00	-.3739650E00	.26289253E00	.25832653E00
119.98	0.788	1.56	.4180408E-02	.3311972E-01	.21106072E00	-.4466420E00	.47181641E00	.45031694E00
3P COSINE COEFFICIENTS								
120.54	0.365	1.18	-.759315E-04	.2850855E-03	.9985649E-02	-.379839E-02	-.775636E-01	-.556217E-01
119.92	0.503	1.27	-.238242E-02	-.259317E-03	.11973778E00	-.293962E-01	-.545044E-01	-.507411E-01
119.98	0.788	1.56	-.782283E-02	-.112195E-01	.25971258E00	.18174421E00	-.637288E-01	-.2932484E00
3P SINE COEFFICIENTS								
120.54	0.365	1.18	.1934416E-02	.[illegible]56095E-03	.1347648E-01	.3603616E-01	.1084973E-01	-.226922E-01
119.92	0.503	1.27	.564.340E-03	-.164210E-02	.2851414E-01	.8618534E-01	.7021630E-01	-.403132E-01
119.98	0.788	1.56	.6674852E-02	-.118432E-01	-.1255707E00	.52720035E00	.20982977E00	-.264610E-01
2P CONTRIBUTIONS TO 3P COSINE COEFFICIENTS								
120.54	0.365	1.18	.6483899E-04	-.824665E-03	.2301190E-01	-.863744E-02	-.501279E-01	-.352357E-01
119.92	0.503	1.27	-.201226E-02	-.411875E-03	.10296156E00	-.289552E-01	-.474088E-01	-.604767E-01
119.98	0.788	1.56	-.983300E-02	-.894717E-02	.29345647E00	.15365747E00	-.450949E-01	-.2515391E00
4P CONTRIBUTIONS TO 3P COSINE COEFFICIENTS								
120.54	0.365	1.18	-.140770E-03	.1109751E-02	-.130263E-01	.4839045E-02	-.274357E-01	-.223660E-01
119.92	0.503	1.27	-.370157E-03	.1525587E-03	.1677622E-01	-.441037E-03	-.709563E-02	.9737587E-02
119.98	0.788	1.56	.2010171E-02	-.227232E-02	-.337439E-01	.2808674E-01	-.180339E-01	-.417093E-01
2P CONTRIBUTIONS TO 3P SINE COEFFICIENTS								
120.54	0.365	1.18	.8246654E-03	.6483899E-04	.8637436E-02	.2301190E-01	.3323573E-01	-.501279E-01
119.92	0.503	1.27	.4118753E-03	-.201226E-02	.2895517E-01	.10296156E00	.6047872E-01	-.474088E-01
119.98	0.788	1.56	.8947170E-02	-.983300E-02	-.1556575E00	.29345647E00	.2515390dE00	-.450949E-01
4P CONTRIBUTIONS TO 3P SINE COEFFICIENTS								
120.54	0.365	1.18	.1109751E-02	.1407705E-03	.4839045E-02	.1302626E-01	-.223860E-01	-.274357E-01
119.92	0.503	1.27	.1525587E-03	.3701568E-03	-.441037E-03	-.167762E-01	.9737587E-02	-.709563E-02
119.98	0.788	1.56	-.227232E-02	-.201017E-02	.2808674E-01	.3374388E-01	-.417093E-01	-.180359E-01

MEAN COEFFICIENTS

Vkt	mu	P	(Ct/sig)o	d(Ct/sig)/dT1c	d(Ct/sig)/dT1s
120.54	0.365	1.18	.4648225E-01	.9536316E-01	.86895085E00
119.92	0.503	1.27	.51968888E-01	-.9131805E-02	.72370923E00
119.98	0.788	1.56	.75986766E-01	-.8480405E-01	.13077182E01

Table III. 33-Foot 3-Blade Rotor Harmonic Analyses of Experimental Blade Bending Moment Data

TEST 12 N = 1

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 3 FLT 12.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.129128E 05

ZERO POSITION USED 9.52 LOAD/IN USED -25500.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.8769762E 04							
-0.1118390E 05	0.3434125E 04	0.1169927E 05	162.930	162.930	1.000000	1	3.322
0.3430391E 03	0.1750458E 04	0.1783154E 04	78.912	39.456	0.152467	2	6.645
0.4743555E 02	0.5718701E 03	0.5733834E 03	85.258	28.419	0.049049	3	9.967
-0.1066765E 03	0.4961563E 03	0.5075122E 03	102.144	25.536	0.043380	4	13.289
0.3228369E 03	-0.6167886E 03	0.6961694E 03	297.625	59.526	0.059505	5	16.611
0.7656126E 02	-0.2146463E 03	0.2280264E 03	289.725	46.288	0.019491	6	19.934
0.1415891E 03	-0.2365787E 03	0.2757117E 03	300.900	42.986	0.023567	7	23.256
0.5424174E 02	-0.7937759E 02	0.9614034E 02	304.346	38.043	0.008218	8	26.578
0.5081520E 02	-0.1038194E 02	0.5186491E 02	348.453	38.717	0.004433	9	29.900
-0.4978917E 02	-0.1440929E 02	0.4800287E 02	197.468	19.747	0.004103	10	33.223

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 3 FLT 12.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.106927E 05

ZERO POSITION USED 3.75 LOAD/IN USED 25100.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.9304660E 04							
-0.8568203E 04	0.3837098E 04	0.9754582E 04	156.836	156.836	1.000000	1	3.322
0.1155783E 04	0.1234703E 04	0.1691250E 04	6.851	23.445	0.173380	2	6.645
0.3582673E 03	0.5117739E 03	0.6247144E 03	55.006	18.335	0.064043	3	9.967
0.1053861E 03	0.4318435E 03	0.4445166E 03	76.286	19.071	0.045570	4	13.289
-0.4053613E 02	-0.3152439E 03	0.3178394E 03	262.673	52.535	0.032584	5	16.611
-0.4593880E 02	-0.1818536E 03	0.1875663E 03	255.823	42.637	0.019229	6	19.934
-0.6516012E 01	-0.4531360E 02	0.4579018E 02	261.814	37.402	0.004693	7	23.256
-0.3848047E 02	0.2964311E 02	0.4857428E 02	142.391	17.799	0.004980	8	26.578
0.6973068E 02	0.1113281E 02	0.7067302E 02	9.063	1.007	0.007245	9	29.900
-0.4385453E 02	-0.2640211E 02	0.5122305E 02	211.026	21.103	0.005251	10	33.223

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 3 FLT 12.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.100342E 05

ZERO POSITION USED 8.27 LOAD/IN USED -30500.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.1801556E 06							
-0.9127121E 04	0.2266587E 04	0.9400434E 04	166.054	166.054	1.000000	1	3.322
0.4704392E 03	0.9155078E 03	0.1007434E 04	65.333	32.667	0.107124	2	6.645
0.2284132E 03	0.5726875E 03	0.6476557E 03	68.256	22.752	0.068861	3	9.967
-0.1156458E 03	0.4553171E 03	0.4697735E 03	104.251	26.063	0.049953	4	13.289
-0.1573733E 03	-0.4672346E 03	0.4933025E 03	251.385	50.277	0.052425	5	16.611
0.1415677E 03	-0.1555677E 03	0.2103395E 03	312.302	52.050	0.022366	6	19.934
0.8560208E 02	-0.1063108E 03	0.1391632E 03	310.188	44.313	0.014798	7	23.256
0.1270260E 03	-0.9024652E 02	0.1558205E 03	324.608	40.576	0.016569	8	26.578
-0.8013020E 02	0.7328471E 02	0.1085878E 03	137.555	15.284	0.011547	9	29.900
-0.4043402E 02	-0.1303628E 03	0.1330489E 03	252.768	25.277	0.014513	10	33.223

Table III. (Continued)

TEST 12 N = 1 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 3 LT 12.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.362011E 04

ZERO POSITION USED 1.25 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2168413E 04							
0.5667146E 03	0.4118765E 02	0.7021956E 03	35.913	35.913	0.251396	1	3.322
-0.2716505E 04	0.6499783E 03	0.2793183E 04	166.544	13.272	1.000000	2	6.645
0.8351410E 02	0.1429215E 03	0.1655933E 03	59.701	19.900	0.059263	3	9.967
-0.1413612E 03	0.5623118E 03	0.5798032E 03	104.110	26.027	0.207578	4	13.289
0.1686953E 03	-0.3438155E 02	0.1721633E 03	348.480	65.695	0.061637	5	16.611
0.9561382E 02	0.3621691E 02	0.1022431E 03	20.746	3.458	0.036605	6	19.934
0.6566207E 02	0.1902056E 03	0.2011227E 03	70.969	10.136	0.072042	7	23.256
0.1114336E 03	0.5465593E 02	0.1241115E 03	26.127	3.266	0.044435	8	26.578
-0.5836301E 03	0.1010862E 03	0.5923156E 03	170.174	13.908	0.212059	9	29.900
-0.3393362E 02	0.9652710E 00	0.3384736E 02	178.366	17.837	0.012118	10	33.223

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 3 FLT 12.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.597757E 04

ZERO POSITION USED 3.12 LOAD/IN USED -20600.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.9600645E 04							
0.1446563E 04	0.4538413E 03	0.1517593E 04	17.395	17.396	0.303461	1	3.322
-0.4918445E 04	0.9119531E 03	0.5002273E 04	169.496	84.748	1.000000	2	6.645
-0.5260525E 01	0.2250397E 03	0.2251012E 03	91.339	30.446	0.045000	3	9.967
-0.2105575E 03	0.6651387E 03	0.6976704E 03	107.564	26.891	0.139471	4	13.289
0.1257264E 03	0.1313521E 03	0.1816084E 03	46.188	9.238	0.036305	5	16.611
-0.1950911E 01	0.9727940E 02	0.9729701E 02	91.090	15.182	0.019451	6	19.934
0.5911447E 02	0.2480570E 03	0.2550035E 03	76.556	10.942	0.050978	7	23.256
0.5633719E 02	0.8869873E 02	0.1050778E 03	57.578	7.197	0.021006	8	26.578
-0.4920483E 03	-0.1374009E 01	0.4820503E 03	180.163	20.018	0.096366	9	29.900
-0.6152354E 02	0.9351784E 02	0.1115407E 03	123.340	12.334	0.022378	10	33.223

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 3 FLT 12.0 TR 41 2 FLAP BEND STA 11
OVERALL CYCLIC LOAD = 0.237151E 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1775990E 04							
-0.7866091E 03	-0.6648037E 03	0.1031446E 04	220.131	220.131	0.889699	1	3.322
0.6301367E 03	0.9731067E 03	0.1159313E 04	57.075	28.537	1.000000	2	6.645
-0.1688921E 02	0.1847324E 03	0.1855029E 03	95.224	31.741	0.160011	3	9.967
-0.4839653E 03	-0.5203303E 03	0.7106096E 03	227.074	56.768	0.612957	4	13.289
0.1232066E 03	0.1711773E 03	0.2109069E 03	54.255	10.851	0.181924	5	16.611
0.1345660E 03	0.9397867E 02	0.1641346E 03	34.930	5.822	0.141575	6	19.934
0.1456687E 02	0.2660699E 02	0.3033357E 02	61.300	8.757	0.026165	7	23.256
-0.5193637E 02	0.6807290E 02	0.8562292E 02	127.342	15.918	0.073857	8	26.578
0.7569308E 01	0.9542684E 01	0.1218020E 02	51.578	5.731	0.010506	9	29.900
-0.5673841E 01	-0.4007123E 02	0.4047092E 02	261.941	26.194	0.034909	10	33.223

Table III. (Continued)

TEST 12 N = 2

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 5 FLT 12.0 TR 6 1 FLAP BEND STA 3
OVERALL CYCLIC LOAD = 0.1274835E 05

ZERO POSITION USED 9.52 LOAD/IN USED -26500.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1353367E 05							
0.1170566E 05	0.1821606E 03	0.1170707E 05	0.892	0.892	1.000000	1	3.247
-0.2497463E 04	-0.2460590E 04	0.3505563E 04	224.574	112.287	0.299474	2	6.494
0.3811450E 03	0.2193354E 03	0.4402118E 03	30.663	13.221	0.042736	3	9.740
0.3621025E 03	0.7416459E 03	0.8255027E 03	63.982	15.996	0.070513	4	12.987
-0.9474338E 03	-0.9026062E 03	0.1308856E 04	223.612	44.722	0.111775	5	16.234
0.5023474E 02	-0.1182074E 02	0.5160677E 02	346.759	57.793	0.004408	6	19.481
-0.1488856E 03	-0.3318030E 03	0.3637166E 03	245.819	35.117	0.031063	7	22.727
0.1235150E 03	0.4245300E 02	0.1306467E 03	19.568	2.371	0.011156	8	25.974
0.7763332E 02	0.1403790E 03	0.1605611E 03	60.662	6.774	0.013715	9	29.221
0.9350841E 02	0.9571712E 02	0.1338111E 03	45.669	4.567	0.011430	10	32.468

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 5 FLT 12.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.1494566E 05

ZERO POSITION USED 9.75 LOAD/IN USED 26100.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1464657E 05							
0.1334725E 05	-0.2646269E 04	0.1360705E 05	348.786	348.786	1.000000	1	3.247
-0.3412449E 04	-0.2550252E 04	0.4260117E 04	216.772	108.386	0.313082	2	6.494
0.3115823E 03	-0.1155701E 03	0.3323250E 03	339.640	113.216	0.024423	3	9.740
0.6064873E 03	0.4563496E 03	0.7590000E 03	36.960	9.240	0.055780	4	12.987
-0.9856189E 03	-0.5752666E 03	0.1144673E 04	210.169	42.034	0.084123	5	16.234
0.7750417E 02	-0.3410898E 03	0.3498733E 03	282.865	47.144	0.025713	6	19.481
-0.3507019E 03	-0.1002411E 03	0.3647466E 03	195.552	27.993	0.026806	7	22.727
0.1233449E 03	-0.1008970E 03	0.1593556E 03	320.717	40.090	0.011711	8	25.974
0.2124570E 03	-0.6964182E 02	0.2235796E 03	341.651	37.983	0.016431	9	29.221
0.2463596E 02	-0.7440413E 02	0.7837666E 02	288.320	23.832	0.005760	10	32.468

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 5 FLT 12.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.1514596E 05

ZERO POSITION USED 8.27 LOAD/IN USED -30500.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1406711E 05							
0.1352852E 05	-0.2193720E 04	0.1380394E 05	350.856	350.856	1.000000	1	3.247
-0.2721366E 04	-0.2819509E 04	0.3918604E 04	226.015	113.007	0.283876	2	6.494
0.4004663E 03	-0.2900374E 03	0.4015151E 03	355.857	118.619	0.029087	3	9.740
0.5531919E 03	0.5150734E 03	0.7555735E 03	40.965	10.241	0.054709	4	12.987
-0.8657871E 03	-0.6704824E 03	0.1097423E 04	217.659	43.532	0.079501	5	16.234
-0.3399510E 02	-0.8401753E 02	0.9063452E 02	247.571	41.328	0.006566	6	19.481
-0.2356384E 03	-0.2816699E 03	0.3699169E 03	229.610	32.801	0.026791	7	22.727
0.8715591E 02	-0.1075250E 03	0.1284116E 03	309.027	38.628	0.010027	8	25.974
0.9369239E 02	0.7726009E 02	0.1214388E 03	39.509	4.390	0.008797	9	29.221
0.2325516E 02	0.2474524E 02	0.3395775E 02	46.778	4.678	0.002460	10	32.468

Table III. (Continued)

TEST 15 N = 2 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 5 FLT 12.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.5664865E 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2662602E 04							
0.3270875E 04	-0.1970774E 04	0.3819714E 04	328.930	328.930	1.000000	1	3.247
-0.1053371E 04	-0.5253750E 03	0.1177119E 04	206.506	103.254	0.308250	2	6.494
0.3259362E 03	0.3430857E 03	0.4732266E 03	46.466	15.489	0.123923	3	9.740
-0.2203455E 03	0.1407732E 04	0.1424687E 04	98.856	24.714	0.373129	4	12.987
0.7200576E 03	0.2846925E 03	0.7742952E 03	21.573	4.315	0.202763	5	16.234
0.7605598E 02	0.5991286E 02	0.9681972E 02	38.229	6.372	0.025354	6	19.481
0.1276225E 03	-0.5179741E 01	0.1277274E 03	357.676	51.097	0.033446	7	22.727
0.2958952E 02	0.5482730E 02	0.6183360E 02	62.460	7.808	0.016192	8	25.974
-0.2765079E 02	-0.8859415E 01	0.2903542E 02	197.766	21.974	0.007603	9	29.221
-0.1524946E 01	-0.1222271E-01	0.1624991E 01	180.431	18.043	0.000426	10	32.468

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 5 FLT 12.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.1128846E 05

ZERO POSITION USED 3.12 LOAD/IN USED -20600.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.1030641E 05							
0.1046790E 04	0.1397053E 04	0.1745716E 04	53.156	53.156	0.181327	1	3.247
0.8075000E 04	0.5242344E 04	0.9627449E 04	32.992	16.496	1.000000	2	6.494
-0.9164026E 03	0.9179756E 03	0.1297101E 04	134.951	44.984	0.134729	3	9.740
0.2123387E 04	-0.1231701E 04	0.2454762E 04	329.883	82.471	0.254575	4	12.987
0.8330837E 01	-0.5432554E 03	0.5433191E 03	270.878	54.176	0.056434	5	16.234
-0.1022927E 03	-0.3560221E 01	0.1023546E 03	181.993	30.332	0.010632	6	19.481
0.1077061E 03	0.3461289E 02	0.1132499E 03	72.715	10.388	0.037653	7	22.727
-0.1022171E 03	-0.9621332E 02	0.1403757E 03	223.267	27.908	0.014581	8	25.974
-0.4932324E 02	-0.2699922E 03	0.2744604E 03	259.647	28.850	0.028508	9	29.221
-0.4504849E 02	0.6806303E 02	0.8162077E 02	123.459	12.350	0.008478	10	32.468

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 5 FLT 12.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.7491625E 04

ZERO POSITION USED 1.25 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1916662E 04							
0.2976089E 03	0.1116885E 04	0.1155656E 04	75.079	75.079	0.201873	1	3.247
0.5201121E 04	0.2394055E 04	0.5725656E 04	24.716	17.358	1.000000	2	6.494
-0.4461494E 03	0.7386876E 03	0.8629607E 03	121.131	40.377	0.150718	3	9.740
0.1553951E 04	-0.1142385E 04	0.1928695E 04	323.678	80.920	0.336849	4	12.987
-0.2117408E 03	-0.4838267E 03	0.5281305E 03	246.364	49.273	0.092235	5	16.234
-0.1246844E 02	0.4495726E 02	0.4665422E 02	105.501	17.583	0.008148	6	19.481
0.1157065E 03	0.1783357E 03	0.2803525E 03	45.425	6.489	0.043725	7	22.727
0.7189859E 02	-0.7575005E 02	0.1043754E 03	312.636	39.005	0.018753	8	25.974
-0.5558206E 03	0.6541400E 02	0.5596569E 03	173.288	19.254	0.097745	9	29.221
-0.1150450E 03	-0.1863740E 03	0.2193398E 03	238.179	23.818	0.038308	10	32.468

Table III. (Continued)

TEST 12 N = 3

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 6 FLT 12.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.320763E 04

ZERO POSITION USED 9.52 LOAD/IN USED -26500.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1143702E 05							
-0.2019764E 04	0.9926543E 03	0.2250513E 04	153.827	153.827	1.000000	1	3.289
-0.6771765E 03	-0.1507896E 03	0.6937626E 03	192.553	96.277	0.308268	2	6.579
0.2553276E 02	0.3672681E 03	0.3681546E 03	85.823	28.674	0.163587	3	9.868
-0.2861670E 01	0.2335463E 03	0.2335665E 03	90.702	22.676	0.103883	4	13.158
-0.4307476E 03	-0.7124709E 03	0.8325613E 03	238.643	47.769	0.369543	5	16.447
0.1776009E 02	0.1462462E 03	0.1473204E 03	83.076	13.846	0.065461	6	19.737
0.6730261E 02	-0.1745034E 03	0.1870322E 03	291.091	41.584	0.082106	7	23.026
0.1049501E 02	-0.4294302E 02	0.4420689E 02	283.733	35.467	0.019643	8	26.316
0.1122158E 03	0.3894141E 02	0.1187805E 03	19.138	2.126	0.052779	9	29.605
0.1927452E 02	0.4833420E 02	0.5203558E 02	68.259	6.826	0.023122	10	32.895

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 6 FLT 12.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.186313E 04

ZERO POSITION USED 3.75 LOAD/IN USED 26100.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1200234E 05							
-0.2754543E 03	-0.1670867E 03	0.3221705E 03	211.240	211.240	0.386806	1	3.289
-0.7199675E 03	-0.4187703E 03	0.8328997E 03	210.184	105.092	1.000000	2	6.579
0.1521497E 03	0.3536670E 03	0.3850063E 03	66.722	22.241	0.462248	3	9.868
0.1019570E 03	0.2923833E 03	0.3096495E 03	70.776	17.694	0.371773	4	13.158
-0.5955464E 03	-0.4455591E 03	0.7283771E 03	217.091	43.416	0.887234	5	16.447
0.4105554E 02	-0.1518385E 03	0.1572911E 03	285.130	57.522	0.188848	6	19.737
-0.1014258E 02	-0.2102862E 03	0.2105307E 03	267.239	38.177	0.252768	7	23.026
0.1054987E 03	-0.9506010E 02	0.1450048E 03	319.027	39.880	0.174096	8	26.316
0.1025523E 03	-0.1021192E 03	0.1447249E 03	315.121	35.013	0.173760	9	29.605
0.7834700E 02	-0.4044965E 02	0.8811726E 02	332.693	33.269	0.105862	10	32.895

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 6 FLT 12.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.194056E 04

ZERO POSITION USED 8.27 LOAD/IN USED -30500.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1201818E 05							
-0.1662259E 03	-0.8306583E 03	0.8475225E 03	258.551	258.551	1.000000	1	3.289
-0.4724648E 03	-0.5563916E 03	0.7305754E 03	229.604	114.802	0.862013	2	6.579
0.1412436E 03	0.3631121E 03	0.3896152E 03	68.745	22.915	0.459711	3	9.868
-0.2735339E 02	0.3264282E 03	0.3275727E 03	94.790	23.697	0.386506	4	13.158
-0.1693321E 03	-0.5644390E 03	0.5892917E 03	253.301	50.660	0.695311	5	16.447
0.1715421E 03	0.1173577E 03	0.2078456E 03	34.377	5.730	0.245238	6	19.737
-0.3744368E 02	-0.2756633E 03	0.2781944E 03	262.265	37.466	0.328244	7	23.026
-0.1043316E 02	-0.1029079E 03	0.1034354E 03	264.211	33.026	0.122044	8	26.316
0.1061837E 03	-0.7024522E 02	0.1289588E 03	327.004	36.334	0.152195	9	29.605
0.2190690E 03	0.2175151E 02	0.2201462E 03	5.670	0.567	0.259753	10	32.895

Table III. (Continued)

TEST 12 N = 3 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP . 33 T 017 CTR 6 FLT 12.0 TR 41 2 FLAP BEND STA 116
OVERALL CYCLIC LOAD = 0.188842E 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2216746E 04							
0.8344802E 03	-0.1324905E 04	0.1565806E 04	302.204	302.204	1.000000	1	3.289
-0.1003236E 03	0.4695857E 03	0.4801825E 03	102.060	51.030	0.306669	2	5.579
0.1524479E 03	0.1219716E 03	0.1952365E 03	38.663	12.888	0.1246RE	3	9.868
-0.1569184E 03	-0.4699458E 02	0.1638044E 03	196.672	49.168	0.104614	4	13.158
0.4231990E 03	0.2760715E 03	0.5052645E 03	33.118	6.624	0.322701	5	16.447
0.1456641E 02	0.6049506E 02	0.6222404E 02	76.467	12.744	0.039739	6	19.737
0.2368472E 02	0.8487456E 02	0.8811726E 02	74.408	10.630	0.056276	7	23.026
-0.3252719E 02	0.4587247E 02	0.5623434E 02	125.340	15.667	0.035914	8	26.316
-0.4648480E 02	0.5498459E 02	0.7200059E 02	130.212	14.468	0.045984	9	29.605
-0.2514140E 02	0.1644316E 02	0.3004105E 02	146.814	14.681	0.019186	10	32.895

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 5 FLT 12.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.306890E C4

ZERO POSITION USED 3.12 LOAD/IN USED -20500.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.1CC5385E 05							
0.1203646E 04	0.1009713E 04	0.1571C73E 04	39.593	39.993	1.000000	1	3.289
-0.2CC0559E 03	0.2211620E 03	0.3022773E 03	132.975	66.487	0.192401	2	5.579
-0.2CC0368E 02	C.6663560E 03	0.6666560E 03	91.720	30.573	0.424331	3	9.868
-0.6787760E 01	-0.1830435E 03	0.1831693E 03	267.876	66.969	0.116588	4	13.158
0.1095028E 03	-0.1142550E 03	0.1582563E 03	313.783	62.757	C.100731	5	16.447
-0.2341589E 02	0.5598132E 02	0.6068123E 02	112.699	18.783	0.038624	6	19.737
-0.1216417E 02	0.1C56456E 03	0.1CE6343E 03	96.569	13.795	0.067688	7	23.026
-0.2178244E 02	0.7942241E 02	0.8235527E 02	105.337	13.167	0.052420	8	26.316
-0.3846282E 03	-0.1659919E 03	0.4189177E 03	203.343	22.594	0.266644	9	29.605
-0.2505859E 02	0.3817773E 02	0.4757655E 02	127.276	12.728	C.030539	10	32.895

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 6 FLT 12.0 TR 38 2 CHORD BEND STA 6
OVERALL CYCLIC LOAD = 0.211173E C4

ZERO POSITION USED 1.25 LOAD/IN USED 1.200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1866970E 04							
0.4803095E 03	0.7414097E 03	0.8432427E 03	57.079	57.079	1.000000	1	3.289
-0.2369641E 02	-0.7038649E 02	0.7426826E 02	251.394	125.697	0.084086	2	5.579
0.2188359E 02	0.4190195E 03	0.4195801E 03	87.038	29.013	0.475045	3	9.868
0.3206583E 01	-0.2330852E 03	0.2331672E 03	270.788	67.697	0.263922	4	13.158
0.2589847E 02	-0.2052592E 03	0.2068846E 03	277.191	55.438	0.234235	5	16.447
0.4419813E 01	0.2924780E 02	0.2957986E 02	81.407	13.568	0.023490	6	19.737
0.2564860E 02	0.2635355E 02	0.3691406E 02	45.855	6.508	0.041794	7	23.026
0.3638275E 02	0.3375269E 02	0.4962816E 02	42.852	5.357	0.056189	8	26.316
-0.6913091E 03	-0.1749664E 03	0.7134167E 03	194.403	21.600	0.796403	9	29.605
-0.1768553E 03	-0.7274529E 01	0.1810101E 03	182.438	18.244	0.193616	10	32.895

Table III. (Continued)

TEST 12 N = 4

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 7 FLT 12.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.8923815E 04

ZERO POSITION USED 9.52 LOAD/IN USED -26300.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1345689E 05							
0.5562626E 04	-0.4155551E 04	0.7268246E 04	325.119	325.119	1.000000	1	3.257
-0.2158354E 04	-0.1808814E 04	0.2814685E 04	219.448	109.724	0.391684	2	6.515
0.2526577E 03	0.1972610E 03	0.3254521E 03	37.305	12.436	0.044777	3	9.772
0.3757937E 03	0.4417119E 03	0.5825399E 03	49.310	12.328	0.080145	4	13.029
-0.5208325E 03	-0.6436194E 03	0.8279568E 03	231.019	-4.204	0.113914	5	16.287
0.2954514E 02	0.3854229E 03	0.3865535E 03	85.616	14.269	0.053184	6	19.544
-0.1357365E 03	-0.8776735E 02	0.1650134E 03	212.123	30.305	0.022703	7	22.801
0.2865016E 02	-0.8722026E 02	0.9180522E 02	289.184	36.023	0.012631	8	26.059
0.1521725E 03	-0.3825488E 02	0.1566077E 03	345.889	38.432	0.021588	9	29.316
0.6755714E 02	-0.8364040E 01	0.6846591E 02	352.983	35.298	0.009420	10	32.573

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 7 FLT 12.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.1049026E 05

ZERO POSITION USED 3.75 LOAD/IN USED 24100.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1631355E 05							
0.4353293E 04	-0.7172572E 04	0.8390375E 04	301.255	301.255	1.000000	1	3.257
-0.4247180E 04	-0.3824930E 04	0.5790340E 04	221.343	110.672	0.690117	2	6.515
-0.3716985E 03	-0.1576995E 04	0.1620207E 04	256.737	85.579	0.193103	3	9.772
0.1616738E 02	-0.1244563E 04	0.1244667E 04	270.745	67.686	0.148345	4	13.029
-0.4545837E 03	-0.1568184E 04	0.1632742E 04	253.834	50.767	0.134597	5	16.287
0.1102156E 03	-0.6254395E 03	0.6355764E 03	279.964	46.666	0.075691	6	19.544
-0.1565248E 03	-0.4139167E 03	0.4424063E 03	244.376	34.911	0.052713	7	22.801
-0.1691592E 03	-0.3085537E 03	0.3518809E 03	241.267	30.158	0.041939	8	26.059
0.4879601E 02	-0.1104291E 03	0.1207296E 03	293.839	32.649	0.014389	9	29.316
0.8103298E 01	0.6673773E 02	0.6722784E 02	83.077	8.308	0.008012	10	32.573

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 7 FLT 12.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.1098C8E 05

ZERO POSITION USED 8.27 LOAD/IN USED -30500.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1376319E 05							
0.8262016E 04	-0.5388051E 04	0.9866367E 04	326.890	326.890	1.000000	1	3.257
-0.1963451E 04	-0.2102097E 04	0.2876444E 04	226.953	113.477	0.291620	2	6.515
0.5443479E 03	0.2999679E 03	0.6215242E 03	28.857	9.619	0.063011	3	9.772
0.4496661E 03	0.4671204E 03	0.6488244E 03	46.103	11.526	0.065720	4	13.029
-0.4187874E 03	-0.6479600E 03	0.7719960E 03	237.036	47.807	0.082521	5	16.287
0.2710883E 02	0.2411323E 03	0.2426511E 03	83.585	13.931	0.024601	6	19.544
-0.4241812E 02	-0.2690732E 03	0.2723960E 03	261.041	37.292	0.027616	7	22.801
0.4746094E 01	0.6700574E 02	0.6711735E 02	85.958	10.744	0.006810	8	26.059
0.2637283E 01	0.1844186E 03	0.1844347E 03	89.243	9.916	0.018698	9	29.316
-0.1304664E 03	0.6540602E 02	0.1477791E 03	151.588	15.199	0.014982	10	32.573

Table III. (Continued)

TEST 12 N = 4 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 7 FLT 12.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.4062216 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2502324E 04							
0.2189821E 04	-0.2614861E 04	0.3459886E 04	312.202	312.202	1.000000	1	3.257
-0.7546626E 03	-0.6626556E 02	0.7575664E 03	185.018	92.509	0.232390	2	6.515
0.2452055E 03	0.2869329E 02	0.2774936E 03	46.487	15.495	0.11 781	3	9.772
0.1433610E 03	0.6307346E 02	0.6468216E 03	77.195	19.299	0.198418	4	13.029
0.2866997E 03	0.4C09075E 03	0.4928726E 03	54.436	10.886	0.151193	5	16.287
-0.4409309E 02	-0.9543933E 02	0.1087767E 03	246.097	41.014	0.033368	6	19.544
0.7516406E 02	-0.2199009E 02	0.7831471E 02	343.652	49.093	0.024024	7	22.801
0.3819853E 02	-0.9463013E 01	0.3935323E 02	346.066	43.261	0.012077	8	26.059
-0.3743455E 01	0.3540945E 02	0.3558685E 02	95.426	10.603	0.012144	9	29.316
-0.2753845E 02	0.9491579E 02	0.9894220E 02	105.402	10.640	0.030351	10	32.573

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 7 FLT 12.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.4891C7E C4

ZERO POSITION USED 3.12 LOAD/IN USED -20600.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.1030023E 05							
0.7607542E 03	0.1359643E 04	0.1388004E 04	60.772	60.772	0.465378	1	3.257
0.3256868E 04	0.7750538E 03	0.3347821E 04	13.386	3.693	1.000000	2	6.515
-0.8058291E 03	0.4783872E 03	0.9271311E 03	149.304	49.768	0.279923	3	9.772
0.6193899E 03	-0.1216505E 04	0.1365111E 04	296.983	74.246	0.407761	4	13.029
-0.4357150E 02	-0.1669832E 03	0.1725742E 03	255.376	51.075	0.051549	5	16.287
-0.1513411E 02	0.3777310E 02	0.4069212E 02	111.834	18.639	0.012155	6	19.544
-0.5046661E 02	0.2630836E 02	0.5691052E 02	152.466	21.781	0.016999	7	22.801
-0.1112117E 03	-0.1986566E 02	0.1129720E 03	190.128	23.766	0.033745	8	26.059
-0.1505544E 03	-0.4631030E 03	0.4866609E 03	251.991	27.999	0.145456	9	29.316
0.5350852E 02	-0.1442687E 02	0.5580559E 02	345.018	34.502	0.016669	10	32.573

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 7 FLT 12.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.3670396 C4

ZERO POSITION USED 1.25 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1895565E 04							
0.1545181E 03	0.1054100E 04	0.1065422E 04	81.639	81.639	0.518561	1	3.257
0.2054016E 04	0.4797513E 02	0.2055476E 04	1.338	0.669	1.000000	2	6.515
-0.6148738E 03	0.4243831E 03	0.7471082E 03	145.387	48.462	0.363631	3	9.772
0.4600786E 03	-0.1032240E 04	0.1130108E 04	294.021	73.505	0.550045	4	13.029
-0.7752209E 02	-0.2096156E 03	0.2236303E 03	249.608	49.922	0.108845	5	16.287
0.2752070E 02	0.8698004E 02	0.9316235E 02	72.560	12.093	0.045344	6	19.544
-0.2475214E 02	0.5900591E 02	0.1020531E 03	104.037	14.862	0.045671	7	22.801
-0.8801459E 02	0.8698443E 02	0.1236745E 03	135.370	16.921	0.060195	8	26.059
-0.4365593E 03	-0.5090571E 03	0.6706140E 03	229.384	25.487	0.326400	9	29.316
0.1733779E 01	-0.7863477E 02	0.7865385E 02	271.263	27.126	0.038282	10	32.573

Table III. (Continued)

TEST 12 N = 5

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 8 FLT 12.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.579841E 04

ZERO POSITION USED 9.52 LOAD/IN USED -26500.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1065204E 05							
-0.4360422E 04	0.1947002E 04	0.4775359E 04	155.938	155.938	1.000000	1	3.311
-0.4319514E 03	0.2929514E 03	0.5219219E 03	145.855	72.927	0.109295	2	6.623
0.2628928E 02	0.4770291E 03	0.4777529E 03	86.846	28.949	0.100045	3	9.934
-0.1933688E 03	0.2662595E 03	0.3290676E 03	125.989	31.497	0.068909	4	13.245
-0.775903aE 02	-0.7207139E 03	0.7248784E 03	263.855	52.771	0.151796	5	16.556
0.1633840E 03	0.2056179E 03	0.2626272E 03	51.529	8.588	0.054996	6	19.868
0.3755208E 01	-0.9299338E 02	0.9306915E 02	272.312	38.902	0.019489	7	23.179
0.1094546E 03	-0.1304611E 02	0.1102294E 03	353.203	44.150	0.023083	8	26.490
0.2857019E 02	0.7478406E 02	0.8005565E 02	69.091	7.677	0.016764	9	29.801
0.4204187E 02	0.9267559E 02	0.1017662E 03	65.599	6.560	0.021311	10	33.113

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 8 FLT 12.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.372625E 04

ZERO POSITION USED 3.75 LOAD/IN USED 26100.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1125711E 05							
-0.2355380E 04	0.1370568E 04	0.2725119E 04	149.805	149.805	1.000000	1	3.311
-0.3253708E 03	0.1501239E 03	0.3583340E 03	155.232	77.616	0.131493	2	6.623
0.2245499E 03	0.4320615E 03	0.4809290E 03	62.538	20.846	0.178682	3	9.934
-0.1358474E 02	0.1915279E 03	0.1920090E 03	94.057	23.514	0.070459	4	13.245
-0.1570741E 03	-0.3291821E 03	0.3647371E 03	244.491	48.898	0.133843	5	16.556
0.1281153E 03	-0.7699446E 02	0.1494713E 03	328.995	54.832	0.054849	6	19.868
-0.4534613E 02	-0.1621945E 03	0.1684142E 03	254.380	36.340	0.061801	7	23.179
0.1193217E 03	-0.3778635E 02	0.1251618E 03	342.428	42.804	0.045929	8	26.490
0.1641319E 02	0.6235677E 02	0.6448068E 02	75.253	8.361	0.023662	9	29.801
-0.4069270E 02	0.1816687E 02	0.4456378E 02	155.942	15.594	0.016353	10	33.113

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 8 FLT 12.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.331316E 04

ZERO POSITION USED 8.27 LOAD/IN USED -30500.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1092228E 05							
-0.2577915E 04	0.5529126E 03	0.2636542E 04	167.895	167.895	1.000000	1	3.311
-0.3038726E 03	-0.5001619E 02	0.3079614E 03	189.347	94.674	0.116805	2	6.623
0.1591511E 03	0.4852939E 03	0.5107241E 03	71.843	23.948	0.193710	3	9.934
0.2680110E 02	0.3045889E 03	0.3057656E 03	84.971	21.243	0.115972	4	13.245
-0.2168747E 03	-0.3016406E 03	0.3715127E 03	234.284	46.857	0.140909	5	16.556
0.2575215E 03	0.1643715E 03	0.3055083E 03	32.549	5.425	0.115875	6	19.868
-0.1219444E 02	-0.9743033E 02	0.9819049E 02	262.866	37.552	0.037242	7	23.179
0.9717383E 02	0.1256221E 03	0.1588196E 03	52.277	6.535	0.060238	8	26.490
0.2654123E 02	0.1205686E 03	0.1234553E 03	77.585	8.621	0.046825	9	29.801
0.3462445E 02	0.7226768E 02	0.8013406E 02	64.400	6.440	0.030394	10	33.113

Table III. (Continued)

TEST 12 N = 5 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 8 FLT 12.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.184451E 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2052836E 04							
0.5115725E 03	-0.1085934E 04	0.1200399E 04	295.225	295.225	1.000000	1	3.311
0.3099860E 02	0.6315220E 03	0.6322822E 03	87.190	43.595	0.526727	2	6.623
0.1061621E 03	0.1914220E 03	0.2188898E 03	60.987	20.329	0.182348	3	9.934
-0.2050760E 03	-0.1117708E 03	0.2335570E 03	208.591	52.148	0.194566	4	13.245
0.1541414E 03	0.2236341E 03	0.2716096E 03	55.423	11.085	0.226266	5	16.556
-0.8629318E 02	0.9088725E 02	0.1253276E 03	133.515	22.252	0.104405	6	19.868
-0.1656677E 02	0.5402710E 02	0.5651004E 02	107.048	15.293	0.047076	7	23.179
-0.5865950E 02	0.1777054E 02	0.6129216E 02	163.146	20.393	0.051060	8	26.490
-0.3602966E 02	0.5531934E 02	0.6601790E 02	123.076	13.675	0.054997	9	29.801
-0.1110979E 02	-0.4610425E 02	0.4742393E 02	256.451	25.645	0.039507	10	33.113

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 8 FLT 12.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.306890E 04

ZERO POSITION USED 3.12 LOAD/IN USED -20600.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.9984500E 04							
0.1140076E 04	0.1114950E 04	0.1594643E 04	44.362	44.362	1.000000	1	3.311
-0.1376998E 04	0.2012568E 03	0.1391627E 04	171.685	85.842	0.872689	2	6.623
-0.1053495E 03	0.1222585E 03	0.1613666E 03	130.751	43.584	0.101205	3	9.934
-0.3292848E 02	0.1283208E 02	0.3534044E 02	158.709	39.677	0.022162	4	13.245
0.1871789E 03	-0.1802217E 03	0.2598379E 03	316.085	63.217	0.162944	5	16.556
-0.2719141E 02	0.6262630E 02	0.6827461E 02	113.470	18.912	0.042815	6	19.868
0.4340353E 02	0.3899631E 01	0.4357837E 02	5.134	0.733	0.027328	7	23.179
-0.3671875E 01	0.5572145E 02	0.5584230E 02	93.770	11.721	0.035019	8	26.490
-0.2462867E 03	-0.9629066E 02	0.2644409E 03	201.354	22.373	0.165831	9	29.801
0.8914604E 02	0.1905295E 02	0.9115935E 02	12.064	1.206	0.057166	10	33.113

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 8 FLT 12.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.173464E 04

ZERO POSITION USED 1.25 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2066398E 04							
0.4002170E 03	0.7984780E 03	0.8931643E 03	63.379	63.379	1.000000	1	3.311
-0.5514990E 03	0.6864290E 02	0.5557544E 03	172.905	86.453	0.622231	2	6.623
-0.8013118E 02	0.1757862E 03	0.1931903E 03	114.505	38.168	0.216299	3	9.934
-0.2878635E 02	0.6466406E 01	0.2950330E 02	167.343	41.836	0.033032	4	13.245
0.8290211E 02	-0.1777250E 03	0.1961095E 03	295.007	59.001	0.219567	5	16.556
-0.5001443E 02	0.5012128E 02	0.7080669E 02	134.939	22.490	0.079276	6	19.868
-0.6858734E 02	0.2427136E 02	0.7275520E 02	160.512	22.930	0.081458	7	23.179
0.2196928E 02	0.1826768E 01	0.2204510E 02	4.753	0.594	0.024682	8	26.490
-0.2624868E 03	-0.5384042E 02	0.2679517E 03	191.592	21.288	0.300003	9	29.801
0.4695135E 02	-0.1232693E 02	0.4854259E 02	345.289	34.529	0.054349	10	33.113

Table III. (Continued)

TEST 12 N = 6

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 9 FLT 12.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.324876E 04

ZERO POSITION USED 9.52 LOAD/IN USED -26500.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1118668E 05							
-0.6394414E 03	0.2245330E 04	0.2334607E 04	105.896	105.896	1.000000	1	3.311
-0.8747993E 03	-0.2330594E 03	0.9053123E 03	194.918	97.459	0.387779	2	6.623
0.1384514E 03	0.4094551E 03	0.4322292E 03	71.318	23.773	0.185140	3	9.934
0.6941992E 02	0.3112700E 03	0.3189172E 03	77.428	19.357	0.136604	4	13.245
-0.4712000E 03	-0.5654297E 03	0.7360300E 03	230.194	46.039	0.315269	5	16.556
0.1061531E 03	0.1289692E 03	0.1670375E 03	50.543	8.424	0.071548	6	19.868
-0.2540971E 02	-0.1482852E 03	0.1504465E 03	260.276	37.182	0.064442	7	23.179
0.2423122E 02	-0.4247243E 02	0.4889845E 02	299.705	37.463	0.020945	8	26.490
0.4049663E 02	0.6210437E 02	0.7414125E 02	56.893	6.321	0.031757	9	29.801
0.1642165E 02	-0.3992143E 02	0.4316701E 02	292.360	29.236	0.018490	10	33.113

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 9 FLT 12.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.287571E 04

ZERO POSITION USED 3.75 LOAD/IN USED 26100.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1211169E 05							
0.1244799E 04	0.1063289E 04	0.1637104E 04	40.503	40.503	1.000000	1	3.311
-0.8805432E 03	-0.6764666E 03	0.1110389E 04	217.533	108.766	0.678264	2	6.623
0.1665851E 03	0.3402009E 03	0.3787971E 03	63.911	21.303	0.231382	3	9.934
0.1530436E 03	0.2252055E 03	0.2722864E 03	55.801	13.950	0.166322	4	13.245
-0.5153611E 03	-0.3645344E 03	0.6312546E 03	215.273	43.055	0.385592	5	16.556
0.3554427E 02	-0.8480360E 01	0.3654192E 02	346.581	57.763	0.022321	6	19.868
-0.9613454E 02	-0.1358308E 03	0.1664087E 03	234.711	33.530	0.101648	7	23.179
0.6993565E 02	-0.6739594E 02	0.9712468E 02	316.059	39.507	0.059327	8	26.490
0.1021829E 03	-0.1441731E 01	0.1021931E 03	359.192	39.910	0.062423	9	29.801
-0.2751518E 01	-0.3021397E 02	0.3033900E 02	264.796	26.480	0.018532	10	33.113

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 9 FLT 12.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.298185E 04

ZERO POSITION USED 8.27 LOAD/IN USED -30500.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1171162E 05							
0.1251227E 04	0.7268542E 03	0.1447026E 04	30.153	30.153	1.000000	1	3.311
-0.5561250E 03	-0.1013446E 04	0.1156005E 04	241.244	120.622	0.798883	2	6.623
0.3226389E 03	0.3360613E 03	0.4658679E 03	46.167	15.389	0.321949	3	9.934
0.1466413E 03	0.3228770E 03	0.3537944E 03	65.869	16.467	0.244498	4	13.245
-0.2255669E 03	-0.5722078E 03	0.6150627E 03	248.485	49.697	0.425053	5	16.556
-0.3261880E 02	0.2321659E 03	0.2344461E 03	97.998	16.333	0.162019	6	19.868
-0.2774338E 02	-0.2465464E 03	0.2481025E 03	263.580	37.654	0.171457	7	23.179
-0.7011078E 02	0.4544389E 02	0.8355037E 02	147.050	18.381	0.057739	8	26.490
0.2033972E 02	-0.1398066E 03	0.1412784E 03	278.278	30.920	0.097634	9	29.801
0.9818467E 01	0.1006013E 03	0.1010793E 03	84.426	8.443	0.069853	10	33.113

Table III. (Continued)

TEST 12 M = 5 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 9 FLT 12.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.188842E 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2174766E 04							
0.1152179E 04	-0.1237506E 04	0.1690839E 04	312.955	312.955	1.000000	1	3.311
-0.1122187E 03	0.3063916E 03	0.3262957E 03	110.116	55.058	0.192979	2	6.623
0.7467464E 02	0.1326409E 03	0.1522167E 03	60.621	20.207	0.090024	3	9.934
-0.5284370E 02	0.1292657E 03	0.1396499E 03	112.235	28.059	0.082592	4	13.245
0.3941631E 03	0.2621790E 03	0.4733943E 03	33.630	6.726	0.279976	5	16.556
-0.4703850E 01	0.5945892E 02	0.5964470E 02	94.523	15.754	0.035275	6	19.868
0.5847498E 02	0.6619096E 02	0.8832080E 02	48.542	6.935	0.052235	7	23.179
-0.3776984E 02	0.2690114E 02	0.4637059E 02	144.540	18.068	0.027425	8	26.490
0.2405599E 01	0.3591895E 02	0.3599940E 02	86.168	9.574	0.021291	9	29.801
-0.2046969E 01	0.9782593E 01	0.9994458E 01	101.818	10.182	0.005911	10	33.113

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 9 FLT 12.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.310088E 04

ZERO POSITION USED 3.12 LOAD/IN USED -20600.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.1041107E 05							
0.1062064E 04	0.1030234E 04	0.1479649E 04	44.128	44.128	1.000000	1	3.311
0.6474116E 03	0.1282229E 04	0.1436403E 04	63.210	31.605	0.970772	2	6.623
-0.1779018E 03	0.6624917E 03	0.6859624E 03	105.031	35.010	0.463598	3	9.934
0.5705859E 02	-0.4352473E 03	0.4389712E 03	277.469	69.367	0.296672	4	13.245
0.1530203E 03	-0.2052316E 03	0.2559986E 03	306.708	61.342	0.173013	5	16.556
0.4780403E 02	0.1255295E 02	0.4942471E 02	14.713	2.452	0.033403	6	19.868
0.1969400E 01	0.1275070E 03	0.1275222E 03	89.115	12.731	0.086184	7	23.179
0.1274403E 02	0.2721440E 02	0.3005052E 02	64.907	8.113	0.020309	8	26.490
-0.4025212E 03	-0.2714448E 03	0.4854951E 03	213.994	23.777	0.328115	9	29.801
-0.6762912E 01	-0.7166156E 02	0.7197995E 02	264.609	26.461	0.048647	10	33.113

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 9 FLT 12.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.211173E 04

ZERO POSITION USED 1.25 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2061463E 04							
0.3799863E 03	0.7993181E 03	0.8850417E 03	64.574	64.574	1.000000	1	3.311
0.5911396E 03	0.5064399E 03	0.7784133E 03	40.587	20.294	0.879522	2	6.623
-0.5890445E 02	0.4398899E 03	0.4438162E 03	97.627	32.542	0.501464	3	9.934
0.1057641E 03	-0.3152168E 03	0.3324934E 03	288.551	72.138	0.375681	4	13.245
0.2566228E 02	-0.2353740E 03	0.2367688E 03	276.222	55.244	0.267523	5	16.556
0.7589674E 02	-0.3420758E 02	0.8324944E 02	335.738	55.956	0.094063	6	19.868
0.2295437E 01	0.2456245E 02	0.2466946E 02	84.661	12.094	0.027874	7	23.179
0.1632263E 03	-0.4198297E 02	0.1685390E 03	345.576	43.197	0.190431	8	26.490
-0.6572786E 03	-0.2005829E 03	0.6872034E 03	196.971	21.886	0.776464	9	29.801
-0.1082427E 03	-0.9905089E 02	0.1467227E 03	222.461	22.246	0.165781	10	33.113

Table III. (Continued)

TEST 12 N = 7

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 10 FLT 12.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.468809E 04

ZERO POSITION USED 9.52 LOAD/IN USED -26500.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1258994E 05							
0.3610871E 04	0.8232202E 03	0.3703523E 04	12.843	12.843	1.000000	1	3.311
-0.6839709E 03	-0.1360578E 04	0.1522823E 04	243.311	121.655	0.411182	2	6.623
0.2470788E 03	0.2113031E 03	0.3251106E 03	40.537	13.512	0.087784	3	9.934
0.1687882E 03	0.3559358E 03	0.3939285E 03	64.629	16.157	0.106366	4	13.245
-0.3398870E 03	-0.5442463E 03	0.6416597E 03	238.015	47.603	0.173257	5	16.556
0.8276236E 02	0.1187117E 03	0.1447137E 03	55.117	9.186	0.039075	6	19.868
-0.3644302E 02	-0.1514425E 03	0.1557656E 03	256.469	36.638	0.042059	7	23.179
-0.2593294E 02	0.1457661E 02	0.2974886E 02	150.660	18.833	0.008033	8	26.490
0.8520605E 02	0.7249805E 02	0.1118751E 03	40.393	4.488	0.030208	9	29.801
0.3727017E 02	0.2336588E 02	0.4398897E 02	32.085	3.208	0.011878	10	33.113

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 10 FLT 12.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.603492E 04

ZERO POSITION USED 3.75 LOAD/IN USED 26100.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1323266E 05							
0.4973586E 04	-0.6422029E 03	0.5014875E 04	352.642	352.642	1.000000	1	3.311
-0.9177959E 03	-0.1521382E 04	0.1776781E 04	238.899	119.449	0.354302	2	6.623
0.2951543E 03	0.2837754E 03	0.4094729E 03	43.870	14.623	0.081652	3	9.934
0.2836274E 03	0.2828459E 03	0.4005576E 03	44.921	11.230	0.079874	4	13.245
-0.4887166E 03	-0.4838579E 03	0.6877224E 03	224.714	44.943	0.137136	5	16.556
-0.9208463E 02	0.1111624E 03	0.1443491E 03	129.638	21.606	0.028784	6	19.868
-0.1524578E 03	-0.1764909E 03	0.2332480E 03	229.171	32.739	0.046511	7	23.179
0.8524478E 02	-0.4341504E 02	0.9566365E 02	333.010	41.626	0.019076	8	26.490
0.1377863E 03	-0.5875932E 02	0.1497923E 03	336.904	37.434	0.029870	9	29.801
0.4291362E 02	0.3192252E 02	0.5348482E 02	36.645	3.664	0.010665	10	33.113

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 10 FLT 12.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.634235E 04

ZERO POSITION USED 8.27 LOAD/IN USED -30500.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1301146E 05							
0.5094164E 04	-0.1070033E 03	0.5095285E 04	358.797	358.797	1.000000	1	3.311
-0.1654490E 03	-0.1600548E 04	0.1609076E 04	264.098	132.049	0.315797	2	6.623
0.2522854E 03	0.3440940E 03	0.4266714E 03	53.752	17.917	0.083738	3	9.934
0.1768275E 03	0.4070122E 03	0.4437644E 03	66.517	16.629	0.087093	4	13.245
-0.3325076E 03	-0.6456782E 03	0.7262654E 03	242.753	48.551	0.142537	5	16.556
0.2641916E 02	0.1252853E 03	0.1280405E 03	78.092	13.015	0.025129	6	19.868
0.6055989E 02	-0.1079388E 03	0.1237670E 03	299.295	42.756	0.024291	7	23.179
0.4763487E 02	0.7959310E 01	0.4829526E 02	9.486	1.186	0.009478	8	26.490
0.6464984E 02	0.7471462E 01	0.6508012E 02	6.592	0.732	0.012773	9	29.801
-0.1862999E 02	0.7139615E 02	0.7378673E 02	104.625	10.462	0.014481	10	33.113

Table III. (Continued)

TEST 12 N = 7 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 10 FLT 12.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.265697E 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2317356E 04							
0.1717480E 04	-0.1455695E 04	0.2251396E 04	319.716	319.716	1.000000	1	3.311
-0.2619929E 03	-0.8656261E 02	0.2759226E 03	198.284	99.142	0.122556	2	6.623
0.9673930E 02	0.3655381E 03	0.3781223E 03	75.176	25.059	0.167950	3	9.934
-0.7680544E 02	0.4261626E 03	0.4330283E 03	100.217	25.054	0.192338	4	13.245
0.3692654E 03	0.2369774E 03	0.4387654E 03	32.690	6.538	0.194886	5	16.556
0.1389021E 02	-0.7424973E 02	0.7553778E 02	280.596	46.766	0.033552	6	19.868
0.7431802E 02	0.7106851E 02	0.1028295E 03	43.720	6.246	0.045674	7	23.179
-0.1121477E 02	0.8027522E 02	0.8105479E 02	97.953	12.244	0.036002	8	26.490
0.9043372E-01	0.5041145E 02	0.5041153E 02	89.897	9.989	0.022391	9	29.801
-0.3943468E 02	-0.1585050E 02	0.4250096E 02	201.897	20.190	0.018878	10	33.113

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 10 FLT 12.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.390007E 04

ZERO POSITION USED 3.12 LOAD/IN USED -20600.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.1042323E 05							
0.8437637E 03	0.1064344E 04	0.1358222E 04	51.594	51.594	0.491882	1	3.311
0.2391656E 04	0.1380082E 04	0.2761276E 04	29.987	14.993	1.000000	2	6.623
-0.6612852E 03	0.8839389E 01	0.6613442E 03	179.234	59.745	0.239507	3	9.934
0.4942263E 03	-0.8362863E 03	0.9714102E 03	300.582	75.146	0.351798	4	13.245
0.4365670E 02	-0.3211614E 03	0.3240881E 03	277.706	55.541	0.117369	5	16.556
0.2321788E 02	-0.9617056E 02	0.9893352E 02	283.573	47.262	0.035829	6	19.868
0.1260905E 02	0.1137744E 03	0.1144710E 03	83.676	11.954	0.041456	7	23.179
-0.4450206E 02	-0.3091634E 02	0.5418721E 02	214.788	26.849	0.019624	8	26.490
-0.1173201E 03	-0.2647856E 03	0.2896125E 03	246.103	27.345	0.104884	9	29.801
0.1767035E 02	-0.1486567E 02	0.2309175E 02	319.927	31.993	0.008363	10	33.113

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 10 FLT 12.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.271508E 04

ZERO POSITION USED 1.25 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1888360E 04							
0.2435611E 03	0.9348105E 03	0.9660190E 03	75.396	75.396	0.586969	1	3.311
0.1544743E 04	0.5677549E 03	0.1645775E 04	20.180	10.090	1.000000	2	6.623
-0.4630442E 03	0.1071136E 03	0.4752717E 03	166.975	55.658	0.288783	3	9.934
0.3950366E 03	-0.6376553E 03	0.7501055E 03	301.779	75.445	0.455776	4	13.245
-0.8941426E 01	-0.2980908E 03	0.2982249E 03	268.282	53.656	0.181206	5	16.556
0.9307123E 02	-0.2636729E 02	0.9673407E 02	344.182	57.364	0.058777	6	19.868
-0.2293056E 02	0.8311740E 02	0.8622244E 02	105.423	15.060	0.052390	7	23.179
-0.4227156E 01	-0.1471151E 00	0.4229713E 01	181.993	22.749	0.002570	8	26.490
-0.2594478E 03	-0.2262056E 03	0.3442122E 03	221.084	24.565	0.209149	9	29.801
-0.6361436E 01	-0.1215589E 03	0.1217252E 03	267.004	26.700	0.073962	10	33.113

Table III. (Continued)

TEST 12 N = 8

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 11 FLT 12.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.3866561E 04

ZERO POSITION USED 9.52 LOAD/IN USED -26500.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1080868E 05							
-0.2457417E 04	0.1026628E 04	0.2663242E 04	157.326	157.326	1.000000	1	3.268
-0.1095151E 04	-0.1662755E 03	0.1108003E 04	188.735	94.368	0.416035	2	6.536
0.1302103E 03	0.4060793E 03	0.4264446E 03	72.221	24.074	0.160122	3	9.804
-0.3731216E 02	0.3484736E 03	0.3504653E 03	96.112	24.028	0.131593	4	13.072
-0.3035122E 03	-0.5180610E 03	0.6004221E 03	239.636	47.927	0.225448	5	16.340
0.5390201E 02	0.4035307E 02	0.6733345E 02	36.820	6.137	0.025283	6	19.608
0.4758235E 02	-0.1601733E 03	0.1670915E 03	286.545	40.935	0.062740	7	22.876
0.9494292E 02	-0.2533246E 02	0.9826437E 02	345.060	43.133	0.036897	8	26.144
0.9197168E 02	0.4904405E 01	0.9210234E 02	3.052	0.339	0.034583	9	29.412
0.2936523E 01	0.4538205E 02	0.4547696E 02	86.298	8.630	0.017076	10	32.680

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 11 FLT 12.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.1984664E 04

ZERO POSITION USED 3.75 LOAD/IN USED 26100.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1174515E 05							
-0.4267283E 03	0.4462247E 02	0.4290549E 03	174.030	174.030	0.310841	1	3.268
-0.1354839E 04	-0.2639009E 03	0.1380302E 04	191.022	95.511	1.000000	2	6.536
0.2318039E 03	0.4837190E 03	0.5363926E 03	64.396	21.465	0.388605	3	9.804
0.1714406E 03	0.1471176E 03	0.2259103E 03	40.634	10.158	0.163667	4	13.072
-0.3762461E 03	-0.2914075E 03	0.4758984E 03	217.758	43.552	0.344779	5	16.340
0.7852191E 02	-0.5768576E 02	0.9743373E 02	323.697	53.950	0.070589	6	19.608
-0.5599425E 02	-0.2089564E 03	0.2163287E 03	254.999	36.428	0.156726	7	22.876
0.7553157E 02	-0.6645279E 02	0.1006031E 03	318.658	39.832	0.072885	8	26.144
0.6337662E 02	-0.7240430E 02	0.9622356E 02	311.196	34.577	0.069712	9	29.412
0.6502017E 02	0.7135796E 02	0.9653796E 02	47.661	4.766	0.069940	10	32.680

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 11 FLT 12.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.1758596E 04

ZERO POSITION USED 8.27 LOAD/IN USED -30500.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1131262E 05							
-0.2500479E 03	-0.6155225E 03	0.6643733E 03	247.891	247.891	0.598334	1	3.268
-0.8686316E 03	-0.6916704E 03	0.1110373E 04	218.529	109.265	1.000000	2	6.536
0.3517983E 03	0.4454150E 03	0.5675884E 03	51.698	17.233	0.511169	3	9.804
0.8261772E 02	0.2739741E 03	0.2861599E 03	73.219	18.305	0.257715	4	13.072
-0.3773994E 03	-0.4421047E 03	0.5812603E 03	229.514	45.903	0.523500	5	16.340
0.1602354E 03	-0.6811436E 02	0.1741118E 03	336.970	56.162	0.156805	6	19.608
0.5861479E 02	-0.2096067E 03	0.2176480E 03	285.623	40.803	0.196013	7	22.876
-0.1533247E 02	-0.1457118E 02	0.2115192E 02	223.542	27.943	0.019049	8	26.144
0.6464626E 02	-0.2609167E 02	0.6971306E 02	338.021	37.558	0.062783	9	29.412
-0.1357422E 01	0.9548285E 02	0.9549248E 02	90.815	9.081	0.086000	10	32.680

Table III. (Continued)

TEST 12 N = 8 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 11 FLT 12.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.184451E 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2144342E 04							
0.8289192E 03	-0.1392947E 04	0.1620928E 04	300.756	300.756	1.000000	1	3.268
-0.2523379E 03	0.4529308E 03	0.5184844E 03	119.123	59.561	0.319869	2	6.536
0.1588523E 03	0.1494040E 03	0.2180725E 03	43.244	14.415	0.134535	3	9.804
-0.5554581E 02	-0.9612758E 02	0.1110222E 03	239.979	59.995	0.068493	4	13.072
0.2407098E 03	0.2154357E 03	0.3230383E 03	41.829	8.366	0.199292	5	16.340
-0.3271263E 02	0.7411371E 02	0.8101205E 02	113.816	18.969	0.049979	6	19.608
0.2911185E 02	0.7454480E 02	0.8002763E 02	68.668	9.810	0.049371	7	22.876
-0.1683688E 02	0.2226920E 02	0.2791769E 02	127.092	15.886	0.017223	8	26.144
-0.2363284E 02	0.5124515E 02	0.5643205E 02	114.758	12.751	0.034815	9	29.412
-0.3563649E 02	0.1149968E 02	0.3744604E 02	162.115	16.212	0.023102	10	32.680

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 11 FLT 12.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.319678E 04

ZERO POSITION USED 3.12 LOAD/IN USED -20600.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.1025345E 05							
0.1146663E 04	0.1161475E 04	0.1632133E 04	45.368	45.368	1.000000	1	3.268
-0.9571301E 03	0.3911982E 03	0.1033989E 04	157.769	78.885	0.633520	2	6.536
-0.2617964E 03	0.8401019E 02	0.2749456E 03	162.209	54.070	0.168458	3	9.804
0.2920691E 02	-0.3802813E 03	0.3814011E 03	274.392	68.598	0.233683	4	13.072
0.1202409E 03	-0.1475197E 03	0.1903154E 03	309.183	61.837	0.116605	5	16.340
0.7949294E 02	0.4326833E 02	0.9050563E 02	28.560	4.760	0.055452	6	19.608
-0.9579773E 02	0.1275420E 03	0.1595123E 03	126.911	18.130	0.097732	7	22.876
-0.4602126E 02	-0.8433887E 02	0.9607808E 02	241.380	30.172	0.058867	8	26.144
-0.1932153E 03	-0.1646223E 02	0.1939153E 03	184.870	20.541	0.118811	9	29.412
0.5299913E 02	-0.1073286E 02	0.5407497E 02	348.552	34.855	0.033131	10	32.680

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 11 FLT 12.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.206145E 04

ZERO POSITION USED 1.25 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2695456E 04							
0.4673865E 03	0.7877078E 03	0.9159331E 03	59.317	59.317	1.000000	1	3.268
-0.3608623E 03	0.1871171E 03	0.4064902E 03	152.592	76.296	0.443799	2	6.536
-0.2266591E 03	0.7935970E 02	0.2401506E 03	160.703	53.568	0.262192	3	9.804
-0.4576067E 02	-0.2534787E 03	0.2575702E 03	259.766	64.942	0.281217	4	13.072
0.5196689E 02	-0.1646663E 03	0.1726909E 03	287.513	57.503	0.188541	5	16.340
0.6112299E 02	0.8493095E 01	0.6171022E 02	7.911	1.318	0.067374	6	19.608
-0.7873242E 02	0.7203711E 02	0.1067152E 03	137.543	19.649	0.116510	7	22.876
-0.8608653E 02	-0.2795934E 02	0.9051306E 02	197.993	24.749	0.098821	8	26.144
-0.2591543E 03	0.4544687E 02	0.2631089E 03	170.053	18.895	0.287258	9	29.412
0.8568761E 02	-0.6296472E 02	0.1063340E 03	323.691	32.369	0.116094	10	32.680

Table III. (Continued)

TEST 12 M = 9

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 12 FLT 12.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.649753E 04

ZERO POSITION USED 9.52 LOAD/IN USED -26500.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1277989E 05							
0.2280115E 04	-0.4169859E 04	0.4752539E 04	298.670	298.670	1.000000	1	3.257
-0.2003283E 04	-0.8527850E 03	0.2177242E 04	203.059	101.530	0.458122	2	6.515
0.1760037E 03	0.4337322E 03	0.4680820E 03	67.913	22.638	0.098491	3	9.772
0.1733412E 03	0.1909523E 03	0.2578953E 03	47.768	11.942	0.054265	4	13.029
-0.3919692E 03	-0.6329048E 03	0.7444517E 03	238.229	47.646	0.156643	5	16.287
-0.3367371E 02	0.1044253E 03	0.1097204E 03	107.873	17.979	0.023087	6	19.544
-0.7717404E 02	-0.7130847E 02	0.1050749E 03	222.738	31.820	0.022109	7	22.801
0.1004390E 03	0.2692859E 02	0.1039863E 03	15.009	1.876	0.021880	8	26.059
0.1762656E 03	0.3332443E 02	0.1794077E 03	10.705	1.189	0.037750	9	29.316
0.5485622E 02	0.9073828E 02	0.1060313E 03	58.845	5.884	0.022310	10	32.573

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 12 FLT 12.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.627793E 04

ZERO POSITION USED 3.75 LOAD/IN USED 26100.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1371314E 05							
0.2503684E 04	-0.5059313E 04	0.5644914E 04	296.329	296.329	1.000000	1	3.257
-0.1453683E 04	-0.1447318E 04	0.2051464E 04	224.870	112.435	0.363418	2	6.515
0.1402430E 03	0.9137650E 03	0.9244651E 03	81.274	27.091	0.163770	3	9.772
0.8119933E 02	-0.3131743E 03	0.3235295E 03	284.535	71.134	0.057313	4	13.029
-0.2961677E 03	0.7626648E 02	0.3058298E 03	165.559	33.112	0.054178	5	16.287
-0.2907961E 03	-0.2261748E 03	0.3683984E 03	217.875	36.312	0.065262	6	19.544
0.9899142E 02	-0.2308135E 03	0.2511457E 03	293.213	41.888	0.044491	7	22.801
0.7210352E 02	0.8797971E 02	0.1137512E 03	50.664	6.333	0.020151	8	26.059
0.7288899E 02	-0.2854047E 02	0.7827745E 02	338.616	37.624	0.013867	9	29.316
0.1611875E 03	0.2344292E 01	0.1612045E 03	0.833	0.083	0.028557	10	32.573

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 12 FLT 12.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.747829E 04

ZERO POSITION USED 8.27 LOAD/IN USED -30500.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1298254E 05							
0.3946604E 04	-0.5465816E 04	0.6741840E 04	305.833	305.833	1.000000	1	3.257
-0.1408787E 04	-0.1285635E 04	0.1907233E 04	222.383	111.192	0.282895	2	6.515
0.3599263E 03	0.3955557E 03	0.5348000E 03	47.700	15.900	0.079325	3	9.772
0.1783657E 03	0.2277898E 03	0.2893140E 03	51.938	12.985	0.042913	4	13.029
-0.5397058E 03	-0.2537534E 03	0.5963833E 03	205.181	41.036	0.088460	5	16.287
0.4574219E 01	0.2272542E 03	0.2273002E 03	88.847	14.808	0.033715	6	19.544
-0.1587417E 03	-0.4315245E 02	0.1645025E 03	195.208	27.887	0.024400	7	22.801
0.8115126E 01	0.1082476E 03	0.1085513E 03	85.713	10.714	0.016101	8	26.059
-0.2659558E 02	0.3802126E 02	0.4639980E 02	124.973	13.886	0.006882	9	29.316
0.7465603E 01	0.1378572E 03	0.1380592E 03	86.900	8.690	0.020478	10	32.573

Table III. (Continued)

TEST 12 M = 9 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 12 FLT 12.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.309614E 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2256832E 04							
0.1390990E 04	-0.2295500E 04	0.2684059E 04	301.214	301.214	1.000000	1	3.257
-0.4482822E 03	0.2960466E 03	0.5372156E 03	146.559	73.280	0.200150	2	6.515
0.2620825E 03	0.1431529E 03	0.2986299E 03	28.644	9.548	0.111261	3	9.772
0.2113453E 03	0.2014773E 03	0.2919929E 03	43.631	10.908	0.108788	4	13.029
0.4107483E 03	0.1539064E 03	0.4386357E 03	20.541	4.108	0.163423	5	16.287
-0.3300130E 01	0.2906879E 02	0.2925551E 02	96.477	16.079	0.010900	6	19.544
0.5105440E 02	0.9947249E 02	0.1118093E 03	62.831	8.976	0.041657	7	22.801
-0.4032869E 02	0.6171695E 02	0.7372505E 02	123.162	15.395	0.027468	8	26.059
-0.7039552E 02	0.3031934E 02	0.7665085E 02	156.700	17.411	0.028558	9	29.316
-0.8622786E 02	-0.1722449E 02	0.8793135E 02	191.296	19.130	0.032761	10	32.573

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 12 FLT 12.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.322874E 04

ZERO POSITION USED 3.12 LOAD/IN USED -20600.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.1059950E 05							
0.9314365E 03	0.1070192E 04	0.1418761E 04	48.965	48.965	1.000000	1	3.257
0.9323896E 03	-0.4440640E 03	0.1032736E 04	334.533	167.267	0.727914	2	6.515
-0.4708821E 03	0.9333245E 03	0.1045382E 04	116.772	38.924	0.736828	3	9.772
0.7945854E 01	-0.7610503E 03	0.7610918E 03	270.598	67.650	0.536448	4	13.029
0.2575748E 02	-0.6612305E 01	0.2659267E 02	345.602	69.120	0.018744	5	16.287
-0.7991080E 02	-0.4097992E 02	0.8980583E 02	207.150	34.525	0.063299	6	19.544
-0.7480957E 02	0.5523361E 02	0.9299042E 02	143.561	20.509	0.065543	7	22.801
-0.5618542E 02	0.6821733E 02	0.8837648E 02	129.476	16.184	0.062291	8	26.059
-0.6565440E 02	-0.2467727E 03	0.2553571E 03	255.101	28.345	0.179986	9	29.316
0.8652571E 02	0.4807617E 02	0.9898491E 02	29.058	2.906	0.069769	10	32.573

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 12 FLT 12.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.246368E 04

ZERO POSITION USED 1.25 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2621394E 04							
0.2771494E 03	0.9918948E 03	0.1029886E 04	74.389	74.389	1.000000	1	3.257
0.5935374E 03	-0.4723252E 03	0.7585366E 03	321.488	160.744	0.736524	2	6.515
-0.2831038E 03	0.6573694E 03	0.7157390E 03	113.300	37.767	0.694969	3	9.772
-0.5202988E 02	-0.6069316E 03	0.6091577E 03	265.100	66.275	0.591480	4	13.029
-0.1612640E 02	-0.8330713E 02	0.8485399E 02	259.043	51.809	0.082392	5	16.287
-0.8085938E 02	0.8190201E 02	0.1150920E 03	134.633	22.439	0.111752	6	19.544
-0.7734793E 02	-0.1980032E 02	0.7984154E 02	194.359	27.766	0.077525	7	22.801
-0.6070757E 02	0.5441734E 02	0.8152701E 02	138.127	17.266	0.079161	8	26.059
-0.2455642E 03	-0.2889810E 03	0.3792251E 03	229.643	25.516	0.368220	9	29.316
0.2276031E 02	-0.4143613E 02	0.4727562E 02	298.779	29.878	0.045904	10	32.573

Table III. (Continued)

TEST 12 N = 10

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 13 FLT 12.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.100753E 05

ZERO POSITION USED 9.52 LOAD/IN USED -26500.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1407782E 05							
0.1627169E 04	-0.9204328E 04	0.9347047E 04	280.025	280.025	1.000000	1	3.257
-0.2150811E 04	-0.8464102E 03	0.2311362E 04	201.481	100.741	0.247283	2	6.515
0.3106885E 03	0.4725430E 03	0.5655300E 03	56.676	18.892	0.060504	3	9.772
0.2857996E 03	0.1843433E 03	0.3400938E 03	32.822	8.206	0.036385	4	13.029
-0.4578179E 03	-0.6701743E 03	0.8116223E 03	235.662	47.132	0.086832	5	16.287
0.1434058E 03	0.3505479E 03	0.3787466E 03	67.751	11.292	0.040520	6	19.544
0.1130881E 02	-0.2635989E 03	0.2638413E 03	272.457	38.922	0.028227	7	22.801
0.3029068E 02	0.2674262E 01	0.3040849E 02	5.045	0.631	0.003253	8	26.059
0.7386035E 02	0.4830176E 02	0.8825195E 02	33.183	3.687	0.009442	9	29.316
0.2642469E 01	0.1059094E 03	0.1059423E 03	88.571	8.857	0.011334	10	32.573

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 13 FLT 12.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.108548E 05

ZERO POSITION USED 3.75 LOAD/IN USED 26100.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1506541E 05							
0.2457352E 04	-0.9816148E 04	0.1011906E 05	284.054	284.054	1.000000	1	3.257
-0.2519446E 04	-0.8024846E 03	0.2644161E 04	197.668	98.834	0.261305	2	6.515
0.2479864E 03	0.2587749E 03	0.3584155E 03	46.220	15.407	0.035420	3	9.772
0.2708672E 03	0.2163862E 03	0.3466870E 03	38.620	9.655	0.034261	4	13.029
-0.6942988E 03	-0.5275723E 03	0.8719995E 03	217.230	43.446	0.086174	5	16.287
-0.1030070E 03	0.2047430E 03	0.2291946E 03	116.707	19.451	0.022650	6	19.544
0.1874858E 02	-0.2341526E 03	0.2349019E 03	274.578	39.225	0.023214	7	22.801
0.8954102E 02	-0.2785036E 02	0.9377223E 02	342.722	42.840	0.009267	8	26.059
0.1086623E 03	-0.4396147E 02	0.1172182E 03	337.973	37.553	0.011584	9	29.316
0.1121278E 02	0.6710112E 02	0.6803148E 02	80.513	8.051	0.006723	10	32.573

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 13 FLT 12.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.115014E 05

ZERO POSITION USED 8.27 LOAD/IN USED -30500.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1436284E 05							
0.3749349E 04	-0.1032079E 05	0.1098072E 05	289.965	289.965	1.000000	1	3.257
-0.1932396E 04	-0.9779661E 03	0.2165772E 04	206.844	103.422	0.197234	2	6.515
0.4668818E 03	0.3289868E 03	0.5711487E 03	35.170	11.723	0.052014	3	9.772
0.2319624E 03	0.4525315E 03	0.5085188E 03	62.861	15.715	0.046310	4	13.029
-0.3651694E 03	-0.7205078E 03	0.8077625E 03	243.123	48.625	0.073562	5	16.287
-0.3270410E 02	0.3904639E 03	0.3918311E 03	94.788	15.798	0.035684	6	19.544
0.1439431E 02	-0.2327917E 03	0.2332363E 03	273.538	39.077	0.021241	7	22.801
0.7901508E 02	0.3304095E 02	0.8587834E 02	23.062	2.883	0.007821	8	26.059
-0.3451183E 02	0.4677701E 02	0.5813049E 02	126.420	14.047	0.005294	9	29.316
-0.1449653E 02	0.1219006E 03	0.1227595E 03	96.782	9.678	0.011180	10	32.573

Table III. (Continued)

TEST 12 N = 10 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 13 FLT 12.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.410622E 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2422429E 04							
0.1262476E 04	-0.3019463E 04	0.3272767E 04	292.690	292.690	1.000000	1	3.257
-0.7065264E 03	0.3439075E 03	0.7857810E 03	154.065	77.023	0.240097	2	6.515
0.3732480E 03	0.1923978E 03	0.4199177E 03	27.270	9.090	0.128307	3	9.772
0.4213823E 03	0.1246920E 02	0.4215667E 03	1.695	0.424	0.128810	4	13.029
0.5716398E 03	0.3321436E 03	0.6613018E 03	30.149	6.030	0.202062	5	16.287
-0.4758710E 02	-0.1032009E 03	0.1136440E 03	245.245	40.874	0.034724	6	19.544
0.2084215E 02	0.1166615E 03	0.1185086E 03	79.871	11.410	0.036211	7	22.801
-0.2616075E 01	0.6424302E 01	0.6937287E 01	112.172	14.022	0.002120	8	26.059
-0.3362935E 02	0.4615292E 02	0.5710539E 02	126.079	14.009	0.017449	9	29.316
-0.5058817E 02	-0.5316616E 01	0.5086678E 02	186.000	18.600	0.015542	10	32.573

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 13 FLT 12.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.607387E 04

ZERO POSITION USED 3.12 LOAD/IN USED -20600.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.1036114E 05							
0.8815503E 03	0.1042737E 04	0.1365441E 04	49.788	49.788	0.395959	1	3.257
-0.4982544E 03	-0.3412255E 04	0.3448440E 04	261.692	130.846	1.000000	2	6.515
-0.1678091E 03	0.1094136E 04	0.1106929E 04	98.720	32.907	0.320994	3	9.772
-0.5265610E 03	-0.9837976E 03	0.1115851E 04	241.843	60.461	0.323581	4	13.029
0.2841682E 03	0.4810938E 02	0.2882119E 03	9.609	1.922	0.083577	5	16.287
0.2680664E 02	0.2266113E 02	0.3510161E 02	40.210	6.702	0.010179	6	19.544
-0.7164551E 02	-0.7410481E 01	0.7202773E 02	185.905	26.558	0.020887	7	22.801
-0.1685449E 02	0.2406966E 02	0.2938405E 02	125.001	15.625	0.008521	8	26.059
-0.6962891E 02	-0.1149382E 03	0.1343837E 03	238.793	26.533	0.038969	9	29.316
-0.1669780E 02	0.2766309E 02	0.3231195E 02	121.116	12.112	0.009370	10	32.573

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 13 FLT 12.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.399721E 04

ZERO POSITION USED 1.25 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2693743E 04							
0.2278215E 03	0.9862517E 03	0.1012223E 04	76.993	76.993	0.462539	1	3.257
-0.4527401E 03	-0.2141061E 04	0.2188406E 04	258.060	129.030	1.000000	2	6.515
-0.5443007E 02	0.7812795E 03	0.7831733E 03	93.985	31.328	0.357874	3	9.772
-0.5649126E 03	-0.7833064E 03	0.9657615E 03	234.201	58.550	0.441308	4	13.029
0.1619971E 03	-0.1088198E 03	0.1951533E 03	326.109	65.222	0.089176	5	16.287
0.1723985E 01	-0.3775769E 02	0.3779703E 02	272.614	45.436	0.017271	6	19.544
-0.1124405E 03	0.4816296E 02	0.1223214E 03	156.813	22.402	0.055895	7	22.801
0.1344314E 02	0.2673708E 02	0.2992639E 02	63.307	7.913	0.013675	8	26.059
-0.1514677E 03	-0.1550056E 03	0.2167238E 03	225.661	25.073	0.099033	9	29.316
0.4131250E 02	-0.1265999E 03	0.1331701E 03	288.073	28.807	0.060853	10	32.573

Table III. (Continued)

TEST 12 N = 11

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 14 FLT 12.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.501707E 04

ZERO POSITION USED 9.52 LOAD/IN USED -26500.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1054964E 05							
-0.3780333E 04	0.1384840E 04	0.4026003E 04	159.881	159.881	1.000000	1	3.268
-0.9805527E 03	0.2464585E 03	0.1011052E 04	165.891	82.946	0.251130	2	6.536
0.1672853E 03	0.3861394E 03	0.4208181E 03	66.576	22.192	0.104525	3	9.804
0.8209483E 02	0.2450760E 03	0.2586604E 03	71.480	17.870	0.064198	4	13.072
-0.2396727E 03	-0.7418938E 03	0.7796470E 03	252.097	50.419	0.193653	5	16.340
0.1758127E 02	0.1603394E 03	0.1613004E 03	83.742	13.957	0.040065	6	19.608
0.3958600E 02	-0.1469434E 03	0.1541147E 03	284.885	40.698	0.038280	7	22.876
0.2414973E 02	-0.1152333E 03	0.1177366E 03	281.836	35.230	0.029244	8	26.144
-0.2391850E 02	-0.1864746E 02	0.3032858E 02	217.941	24.216	0.007533	9	29.412
-0.6707790E 01	0.1536502E 02	0.1676538E 02	113.584	11.358	0.004164	10	32.680

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 14 FLT 12.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.275419E 04

ZERO POSITION USED 3.75 LOAD/IN USED 26100.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1114830E 05							
-0.1434687E 04	0.7072146E 03	0.1599524E 04	153.759	153.759	1.000000	1	3.268
-0.8749473E 03	-0.7424522E 02	0.8780918E 03	184.850	92.425	0.548971	2	6.536
0.2041443E 03	0.4230820E 03	0.4697588E 03	64.242	21.414	0.293687	3	9.804
0.6662521E 02	0.3584255E 03	0.3645652E 03	79.470	19.867	0.227921	4	13.072
-0.4644307E 03	-0.5597629E 03	0.7273447E 03	230.318	46.064	0.454726	5	16.340
-0.2174163E 03	-0.3713454E 02	0.2205648E 03	189.693	31.615	0.137894	6	19.608
-0.3163422E 02	-0.2425665E 03	0.2446206E 03	262.570	37.510	0.152933	7	22.876
-0.2867610E 02	-0.1447673E 03	0.1475957E 03	258.797	32.350	0.092277	8	26.144
0.3050564E 01	-0.1147185E 03	0.1147590E 03	271.523	30.169	0.071746	9	29.412
0.4771060E 02	-0.1242524E 02	0.4930200E 02	345.403	34.540	0.030823	10	32.680

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 14 FLT 12.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.236654E 04

ZERO POSITION USED 8.27 LOAD/IN USED -30500.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1112912E 05							
-0.1431002E 04	0.4973212E 02	0.1431865E 04	178.010	178.010	1.000000	1	3.268
-0.6166160E 03	-0.2378383E 03	0.6608950E 03	201.092	100.546	0.461562	2	6.536
0.2090819E 03	0.3382605E 03	0.3976624E 03	58.279	19.426	0.277723	3	9.804
0.2385352E 02	0.2807888E 03	0.2818000E 03	85.144	21.286	0.196806	4	13.072
-0.1155607E 03	-0.5167205E 03	0.5294849E 03	257.394	51.479	0.369787	5	16.340
0.1878342E 03	-0.5297607E 02	0.1951620E 03	344.249	57.375	0.136299	6	19.608
-0.4459927E 02	-0.6436925E 02	0.7831023E 02	235.283	33.612	0.054691	7	22.876
-0.1799673E 02	-0.1802495E 02	0.2547118E 02	225.045	28.131	0.017789	8	26.144
0.2944183E 02	-0.5819770E 01	0.3001152E 02	348.818	38.758	0.020960	9	29.412
0.5180989E 02	0.1514026E 03	0.1600219E 03	71.109	7.111	0.111758	10	32.680

Table III. (Continued)

TEST 12 N = 11 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP : 33 T 017 CTR 14 FLT 12.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.199822E 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2237227E 04							
0.7029087E 03	-0.1253321E 04	0.1436974E 04	299.285	299.285	1.000000	1	3.268
-0.1403295E 03	0.5885537E 03	0.6050520E 03	103.411	51.705	0.421060	2	6.536
0.6763460E 02	0.6057730E 02	0.9079674E 02	41.849	13.950	0.063186	3	9.804
-0.1246157E 03	-0.7185014E 02	0.1438454E 03	209.967	52.492	0.100103	4	13.072
0.2400510E 03	0.3319973E 03	0.4096909E 03	54.131	10.826	0.285107	5	16.340
0.5136110E 02	0.4463831E 02	0.6804807E 02	40.994	6.832	0.047355	6	19.608
0.2722591E 02	0.1005395E 03	0.1041606E 03	74.848	10.693	0.072486	7	22.876
0.1790964E 02	-0.3013408E 01	0.1816138E 02	350.449	43.806	0.012639	8	26.144
-0.1800060E 02	0.1665019E 02	0.2452040E 02	137.232	15.248	0.017064	9	29.412
-0.5731764E 01	-0.1322647E 02	0.1441501E 02	246.570	24.657	0.010032	10	32.680

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 14 FLT 12.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.294103E 04

ZERO POSITION USED 3.12 LOAD/IN USED -20600.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.9915969E 04							
0.1087578E 04	0.1105789E 04	0.1550998E 04	45.476	45.476	1.000000	1	3.268
-0.5819001E 03	0.9292317E 03	0.1096394E 04	122.056	61.028	0.706895	2	6.536
0.5464810E 02	0.9148990E 02	0.1065683E 03	59.150	19.717	0.068709	3	9.804
0.4136957E 02	-0.3155530E 03	0.3182532E 03	277.469	69.367	0.205192	4	13.072
0.1656994E 03	-0.2084382E 03	0.2662756E 03	308.483	61.697	0.171680	5	16.340
0.4721169E 02	-0.5797710E 02	0.7476820E 02	309.156	51.526	0.048207	6	19.608
-0.5457182E 02	0.9842979E 02	0.1125456E 03	119.005	17.001	0.072563	7	22.876
-0.5746690E 02	-0.7584190E 02	0.9515479E 02	232.848	29.106	0.061351	8	26.144
-0.8762891E 02	-0.3449099E 03	0.3558674E 03	255.745	28.416	0.229444	9	29.412
-0.3040277E 02	-0.8299043E 02	0.8838387E 02	249.880	24.988	0.056985	10	32.680

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 14 FLT 12.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.193575E 04

ZERO POSITION USED 1.25 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2693411E 04							
0.3459866E 03	0.9346492E 03	0.9966323E 03	69.686	69.686	1.000000	1	3.268
-0.1818286E 03	0.5166265E 03	0.5476902E 03	109.390	54.695	0.549541	2	6.536
0.6257507E 02	0.1027982E 03	0.1203458E 03	58.670	19.557	0.120752	3	9.804
0.7602332E 02	-0.2455713E 03	0.2570696E 03	287.201	71.800	0.257938	4	13.072
0.6924039E 02	-0.2599707E 03	0.2690334E 03	284.914	56.983	0.269943	5	16.340
0.1522098E 02	0.2451382E 02	0.2885490E 02	58.163	9.694	0.028952	6	19.608
-0.1387834E 03	0.7089528E 02	0.1558428E 03	152.941	21.849	0.156369	7	22.876
-0.1350517E 02	0.7202641E 02	0.7328157E 02	100.620	12.577	0.073529	8	26.144
-0.2570530E 03	-0.4027256E 03	0.4777698E 03	237.451	26.383	0.479384	9	29.412
-0.2520534E 02	-0.1051280E 03	0.1081074E 03	256.517	25.652	0.108473	10	32.680

Table III. (Continued)

TEST 12 N = 12

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 15 FLT 12.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.518157E 04

ZERO POSITION USED 9.52 LOAD/IN USED -26500.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1031332E 05							
-0.2285722E 04	0.3543391E 04	0.4216646E 04	122.825	122.825	1.000000	1	3.268
0.3565895E 02	-0.2826858E 03	0.2849258E 03	277.189	138.595	0.067572	2	6.536
0.1733150E 03	0.5891394E 03	0.6141035E 03	73.607	24.536	0.145638	3	9.804
0.6129915E 02	0.3846567E 03	0.3895122E 03	80.945	20.236	0.092375	4	13.072
-0.1429324E 03	-0.5959155E 03	0.6128171E 03	256.517	51.302	0.145333	5	16.340
-0.3564355E 02	0.1572400E 03	0.1612293E 03	102.772	17.129	0.038236	6	19.608
0.5564897E 02	-0.1829916E 03	0.1912662E 03	286.915	40.988	0.045360	7	22.876
0.5143999E 02	0.8643706E 02	0.1005854E 03	59.242	7.405	0.023854	8	26.144
0.4700607E 02	0.4434485E 02	0.6462500E 02	43.334	4.815	0.015326	9	29.412
-0.7383463E 02	0.1181773E 03	0.1393464E 03	121.996	12.200	0.033047	10	32.680

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 15 FLT 12.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.372625E 04

ZERO POSITION USED 3.75 LOAD/IN USED 26100.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1143490E 05							
-0.4537205E 03	0.2868352E 04	0.2904016E 04	98.989	98.989	1.000000	1	3.268
-0.1221153E 03	-0.3287280E 03	0.3506768E 03	249.621	124.811	0.120756	2	6.536
0.1430941E 03	0.3933096E 03	0.4185310E 03	70.008	23.336	0.144121	3	9.804
0.1676121E 03	-0.2381086E 03	0.2911863E 03	54.857	13.714	0.100270	4	13.072
-0.5000198E 03	-0.6122720E 03	0.7905042E 03	230.763	46.153	0.272211	5	16.340
-0.1493176E 03	-0.8132595E 00	0.1493198E 03	180.312	30.052	0.051418	6	19.608
-0.1553176E 03	-0.2309291E 03	0.2833000E 03	236.753	33.822	0.097555	7	22.876
0.2925726E 02	-0.5544613E 01	0.2977805E 02	349.269	43.659	0.010254	8	26.144
0.8994054E 02	-0.2437000E 02	0.9318364E 02	344.839	38.315	0.032088	9	29.412
0.4616003E 02	0.1525282E 01	0.4618523E 02	1.893	0.189	0.015904	10	32.680

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 15 FLT 12.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.350249E 04

ZERO POSITION USED 8.27 LOAD/IN USED -30500.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1065263E 05							
-0.5077275E 03	0.2152679E 04	0.2211744E 04	103.271	103.271	1.000000	1	3.268
0.8495984E 02	-0.6656047E 03	0.6710051E 03	277.274	138.637	0.303383	2	6.536
0.3185857E 03	0.3993008E 03	0.5108208E 03	51.415	17.138	0.230958	3	9.804
0.4553038E 02	0.4328672E 03	0.4352551E 03	83.995	20.999	0.196793	4	13.072
-0.3401328E 03	-0.6063218E 03	0.6952097E 03	240.709	48.142	0.314326	5	16.340
0.1525325E 02	-0.1140702E 03	0.1150855E 03	277.616	46.269	0.052034	6	19.608
0.1274273E 02	-0.1742924E 03	0.1747576E 03	274.181	39.169	0.079013	7	22.876
0.1017990E 03	-0.1011784E 02	0.1023006E 03	354.324	44.290	0.046253	8	26.144
0.9271136E 02	-0.1428483E 02	0.9380537E 02	351.241	39.027	0.042412	9	29.412
0.1088231E 03	0.7640570E 02	0.1329673E 03	35.073	3.507	0.060119	10	32.680

Table III. (Continued)

TEST 12 M = 12 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 15 FLT 12.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.191038E 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1995385E 04							
0.8388174E 03	-0.8189861E 03	0.1172328E 04	315.685	315.685	1.000000	1	3.268
0.1617136E 03	0.4293279E 03	0.4587739E 03	69.360	34.680	0.391336	2	6.536
0.6674788E 02	0.2363804E 03	0.2456236E 03	74.232	24.744	0.209518	3	9.804
-0.2149552E 03	0.5436453E 02	0.2217233E 03	165.807	41.452	0.189151	4	13.072
0.3639854E 03	0.2522168E 03	0.4428303E 03	34.719	6.944	0.377736	5	16.340
0.7712878E 02	-0.2101738E 02	0.7994107E 02	344.757	57.460	0.068190	6	19.608
0.5761333E 02	0.7458630E 02	0.9424652E 02	52.316	7.474	0.080393	7	22.876
-0.9950093E 01	0.2471318E 02	0.2664105E 02	111.931	13.991	0.022725	8	26.144
-0.5097266E 02	-0.3125644E 02	0.5979279E 02	211.517	23.502	0.051003	9	29.412
-0.4145560E 02	-0.1039530E 01	0.4146863E 02	181.436	18.144	0.035373	10	32.680

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 15 FLT 12.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.348449E 04

ZERO POSITION USED 3.12 LOAD/IN USED -20600.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.1029743E 05							
0.1044209E 04	0.1124514E 04	0.1534569E 04	47.121	47.121	0.841533	1	3.268
-0.1060684E 04	0.1483423E 04	0.1823539E 04	125.568	62.784	1.000000	2	6.536
-0.3001790E 02	0.6755501E 02	0.7392395E 02	113.958	37.986	0.040539	3	9.804
0.1775825E 03	-0.2875405E 03	0.3379570E 03	301.699	75.425	0.185330	4	13.072
0.2454795E 03	-0.7828732E 02	0.2576606E 03	342.312	68.462	0.141297	5	16.340
0.3616753E 01	0.2971680E 02	0.2993608E 02	83.061	13.843	0.016416	6	19.608
-0.1217524E 02	0.8856705E 02	0.8939998E 02	97.827	13.975	0.049026	7	22.876
-0.2016676E 02	0.3466280E 02	0.4010251E 02	120.191	15.024	0.021992	8	26.144
-0.2300647E 03	-0.9196104E 02	0.2477632E 03	201.787	22.421	0.135869	9	29.412
0.3571831E 02	-0.7837445E 02	0.8612984E 02	294.500	29.450	0.047232	10	32.680

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 15 FLT 12.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.241341E 04

ZERO POSITION USED 1.25 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.3061221E 04							
0.3582964E 03	0.7723032E 03	0.8513687E 03	65.112	65.112	0.935629	1	3.268
-0.4560264E 03	0.7874238E 03	0.9099429E 03	120.077	60.038	1.000000	2	6.536
-0.6448268E 02	-0.6775376E 01	0.6483763E 02	185.998	61.999	0.071255	3	9.804
0.1249656E 03	-0.1461212E 03	0.1922701E 03	310.538	77.634	0.211299	4	13.072
0.5001846E 02	-0.2020396E 03	0.2081390E 03	283.905	56.781	0.228738	5	16.340
0.7930544E 02	-0.3476332E 01	0.7936158E 02	357.490	59.582	0.087238	6	19.608
0.1260892E 02	0.9455847E 02	0.9539542E 02	82.405	11.772	0.104837	7	22.876
0.5621837E 02	-0.4310364E 01	0.5638336E 02	355.615	44.452	0.061964	8	26.144
-0.2992937E 03	-0.1873462E 02	0.2998794E 03	183.582	20.398	0.329558	9	29.412
0.1342615E 02	-0.1084819E 03	0.1093096E 03	277.055	27.706	0.120128	10	32.680

Table III. (Continued)

TEST 12 N = 13

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 16 FLT 12.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.113090E 05

ZERO POSITION USED 9.52 LOAD/IN USED -26500.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.8180645E 04							
-0.3306658E 04	0.1019439E 05	0.1071726E 05	107.971	107.971	1.000000	1	3.268
0.1200697E 04	-0.3115313E 03	0.1240453E 04	345.455	172.727	0.115744	2	6.536
0.1120540E 03	0.5483291E 03	0.5596614E 03	78.450	26.150	0.052221	3	9.804
-0.1856760E 02	0.2224604E 03	0.2232339E 03	94.771	23.693	0.020829	4	13.072
-0.3817063E 03	-0.6594871E 03	0.7619861E 03	239.938	47.988	0.071099	5	16.340
-0.4916243E 02	0.3506662E 02	0.6038719E 02	144.500	24.083	0.005635	6	19.608
-0.3079274E 02	-0.2706396E 03	0.2723857E 03	263.509	37.644	0.025416	7	22.876
0.7357845E 02	0.2612012E 02	0.7807716E 02	19.545	2.443	0.007285	8	26.144
0.1020679E 03	-0.7271548E 02	0.1253212E 03	324.533	36.059	0.011693	9	29.412
0.3861328E 01	0.5096852E 02	0.5111458E 02	85.668	8.567	0.004769	10	32.680

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 16 FLT 12.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.903212E 04

ZERO POSITION USED 3.75 LOAD/IN USED 26100.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.9792145E 04							
-0.1579468E 03	0.8865586E 04	0.8866992E 04	91.021	91.021	1.000000	1	3.268
0.1078732E 04	-0.1123921E 04	0.1557838E 04	313.825	156.912	0.175690	2	6.536
0.1696461E 03	0.3481914E 03	0.3873203E 03	64.024	21.341	0.043681	3	9.804
0.8834180E 02	0.2248771E 03	0.2416070E 03	68.553	17.138	0.027248	4	13.072
-0.6059434E 03	-0.1479935E 03	0.6237542E 03	193.725	38.745	0.070346	5	16.340
-0.1039926E 03	-0.4548306E 02	0.1135040E 03	203.623	33.937	0.012801	6	19.608
-0.7044313E 02	-0.1643094E 03	0.1787731E 03	246.794	35.256	0.020162	7	22.876
0.1259515E 03	-0.3180652E 02	0.1299055E 03	345.827	43.228	0.014650	8	26.144
0.2511469E 02	0.5959450E 02	0.6467032E 02	67.148	7.461	0.007293	9	29.412
0.3720886E 02	0.5921939E 02	0.6993878E 02	57.858	5.786	0.007888	10	32.680

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 16 FLT 12.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.856089E 04

ZERO POSITION USED 6.27 LOAD/IN USED -30500.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.8633801E 04							
-0.1176832E 04	0.8324324E 04	0.8407098E 04	98.047	98.047	1.000000	1	3.268
0.1030771E 04	-0.5661558E 03	0.1176019E 04	331.222	165.611	0.139884	2	6.536
0.1365718E 03	0.5688694E 03	0.5850334E 03	76.500	25.500	0.069588	3	9.804
0.4487000E 02	0.3929644E 03	0.3955178E 03	83.486	20.871	0.047046	4	13.072
-0.3747224E 03	-0.6007751E 03	0.7596318E 03	240.443	48.089	0.090356	5	16.340
0.6701388E 00	-0.5851637E 02	0.5852020E 02	270.656	45.109	0.006961	6	19.608
-0.3035558E 02	-0.8699956E 02	0.9214328E 02	250.765	35.824	0.010960	7	22.876
0.7679068E 02	0.1839366E 02	0.7896283E 02	13.470	1.684	0.009392	8	26.144
-0.1073600E 02	0.3420485E 02	0.3585016E 02	107.426	11.936	0.004264	9	29.412
0.8528754E 02	0.7512662E 02	0.1136572E 03	41.376	4.138	0.013519	10	32.680

Table III. (Continued)

TEST 12 N = 13 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 16 FLT 12.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.151513E 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1710005E 04							
0.8549321E 03	0.1818813E 03	0.8740649E 03	12.010	12.010	1.000000	1	3.268
0.6729229E 03	0.8245860E 02	0.6779561E 03	6.986	3.493	0.775636	2	6.536
0.9763519E 02	0.2399129E 03	0.2590188E 03	67.856	22.618	0.296338	3	9.804
-0.4935920E 03	0.8383751E 02	0.5006614E 03	170.360	42.590	0.572797	4	13.072
0.3947622E 03	0.9419487E 02	0.4056445E 03	13.420	2.684	0.464318	5	16.340
0.5389606E 02	0.2264496E 02	0.5846190E 02	22.78	3.798	0.066885	6	19.608
0.6057709E 02	0.7911534E 02	0.9964345E 02	52.559	7.508	0.114000	7	22.876
0.1838670E 01	0.5444189E 02	0.5447293E 02	88.066	11.008	0.062321	8	26.144
-0.3636905E 02	0.5926811E 02	0.6953714E 02	121.535	13.504	0.079556	9	29.412
0.6956169E 01	0.2870074E 02	0.2953174E 02	76.376	7.638	0.033787	10	32.680

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 16 FLT 12.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.556238E 04

ZERO POSITION USED 3.12 LOAD/IN USED -20600.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.1002269E 05							
0.7955059E 03	0.1012928E 04	0.1287964E 04	51.856	51.856	0.341222	1	3.268
-0.2274741E 04	0.3012120E 04	0.3774561E 04	127.060	63.530	1.000000	2	6.536
0.2091094E 03	0.3624961E 03	0.4184854E 03	60.021	20.007	0.110870	3	9.804
0.5278254E 03	-0.2519198E 01	0.5278313E 03	359.726	89.932	0.139839	4	13.072
0.3134275E 03	-0.1728057E 03	0.3579084E 03	331.130	66.226	0.094821	5	16.340
0.8679785E 02	0.9684146E 02	0.1300466E 03	48.130	8.022	0.034453	6	19.608
0.5929601E 02	0.7816124E 02	0.9810606E 02	52.815	7.545	0.025992	7	22.876
0.4440430E 01	0.9333984E 02	0.9344539E 02	87.276	10.910	0.024757	8	26.144
-0.1347017E 03	0.7762575E 02	0.1554680E 03	150.046	16.672	0.041188	9	29.412
-0.4229469E 02	0.2174544E 02	0.4755739E 02	152.790	15.279	0.012599	10	32.680

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 16 FLT 12.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.364525E 04

ZERO POSITION USED 1.25 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.3050609E 04							
0.2088951E 03	0.7964048E 03	0.8233455E 03	75.302	75.302	0.395536	1	3.268
-0.1030146E 04	0.1808819E 04	0.2081593E 04	119.662	59.831	1.000000	2	6.536
0.2241872E 03	0.2571667E 03	0.3411665E 03	48.919	16.306	0.163897	3	9.804
0.5542544E 03	0.7943939E 02	0.5599182E 03	8.156	2.039	0.268985	4	13.072
0.1555928E 03	-0.2262726E 03	0.2746060E 03	334.514	60.903	0.131921	5	16.340
0.1914316E 03	0.8033626E 02	0.2076061E 03	22.766	3.794	0.099734	6	19.608
0.1591690E 02	0.1688232E 03	0.1695719E 03	84.614	12.088	0.081463	7	22.876
0.2919725E 02	0.1423077E 03	0.1452720E 03	78.405	9.801	0.069789	8	26.144
-0.2320803E 03	0.1738236E 03	0.2899585E 03	143.167	15.907	0.139296	9	29.412
-0.4848148E 02	0.3665522E 02	0.6089960E 02	142.758	14.276	0.029256	10	32.680

Table III. (Continued)

TEST 12 N = 14

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 17 FLT 12.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.147634E 05

ZERO POSITION USED 9.52 LOAD/IN USED -26500.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.6376328E 04							
-0.3424651E 04	0.1459169E 05	0.1498818E 05	103.208	103.208	1.000000	1	3.279
0.1580135E 04	0.4859306E 01	0.1580142E 04	0.176	0.088	0.105426	2	6.557
-0.3782921E 02	0.4383513E 03	0.4399805E 03	94.932	31.644	0.029355	3	9.836
-0.6516721E 02	0.2622852E 03	0.2702595E 03	103.953	25.988	0.018032	4	13.115
0.2804543E 03	-0.7079187E 03	0.7614462E 03	291.612	58.322	0.050803	5	16.393
-0.1167691E 03	-0.1832610E 03	0.2173007E 03	237.496	39.583	0.014498	6	19.672
0.1045404E 03	-0.2078059E 02	0.1065657E 03	348.757	49.822	0.007111	7	22.951
0.1209136E 02	0.5205219E 02	0.5343611E 02	76.922	9.615	0.003565	8	26.230
0.1584860E 03	0.5993077E 02	0.1694388E 03	20.714	2.302	0.011305	9	29.508
0.2124837E 02	-0.1600726E 02	0.2660310E 02	323.008	32.301	0.001775	10	32.787

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 17 FLT 12.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.132849E 05

ZERO POSITION USED 3.75 LOAD/IN USED 26100.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.8710891E 04							
0.9668281E 03	0.1272183E 05	0.1275851E 05	85.654	85.654	1.000000	1	3.279
0.1350338E 04	-0.1467065E 04	0.2038675E 04	312.241	156.121	0.157438	2	6.557
0.1570660E 03	0.1647996E 03	0.2276590E 03	46.376	15.459	0.017844	3	9.836
-0.9163487E 02	0.2886650E 03	0.3028604E 03	107.612	26.903	0.023738	4	13.115
-0.5840570E 02	-0.4035583E 03	0.4077627E 03	261.765	52.353	0.031960	5	16.393
-0.1238636E 03	-0.1212979E 03	0.1733648E 03	224.400	37.400	0.013588	6	19.672
-0.2437857E 02	-0.1098760E 03	0.1125479E 03	257.490	36.784	0.008821	7	22.951
0.6922200E 02	0.1872742E 02	0.7171053E 02	15.138	1.892	0.005621	8	26.230
0.2533203E 02	0.1025106E 03	0.1055942E 03	76.119	8.458	0.008276	9	29.508
-0.2056696E 02	-0.5403580E 02	0.5781754E 02	249.162	24.916	0.004532	10	32.787

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 17 FLT 12.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.123060E 05

ZERO POSITION USED 6.27 LOAD/IN USED -30500.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.7297426E 04							
-0.1000039E 04	0.1222838E 05	0.1226920E 05	94.675	94.675	1.000000	1	3.279
0.1329882E 04	-0.8920413E 03	0.1601350E 04	326.147	163.074	0.130518	2	6.557
0.1561162E 03	0.4201897E 03	0.4482539E 03	69.618	23.206	0.036535	3	9.836
0.1594683E 03	0.5284458E 03	0.5519829E 03	73.208	18.302	0.044989	4	13.115
0.7033365E 02	-0.4916006E 03	0.4966064E 03	278.142	55.628	0.040476	5	16.393
-0.1006681E 03	-0.1430681E 03	0.1749637E 03	234.867	39.144	0.014260	6	19.672
0.9309180E 02	-0.2461328E 02	0.9629068E 02	345.190	49.313	0.007848	7	22.951
0.1253479E 03	-0.5188976E 02	0.1356637E 03	337.512	42.189	0.011057	8	26.230
0.7925726E 02	0.1079137E 03	0.1338921E 03	53.705	5.967	0.010913	9	29.508
0.3191861E 02	-0.4526150E 01	0.3223792E 02	351.929	35.193	0.002628	10	32.787

Table III. (Continued)

TEST 12 N = 14 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 17 FLT 12.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.232759E 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1642150E 04							
0.1143555E 04	0.7905481E 03	0.1390210E 04	34.656	34.656	1.000000	1	3.279
0.6619150E 03	-0.3594147E 02	0.6628901E 03	356.892	178.446	0.476827	2	6.557
-0.1862946E 02	0.1765878E 03	0.1775677E 03	96.022	32.007	0.127727	3	9.836
-0.7590400E 03	0.2532241E 01	0.7590442E 03	179.809	44.952	0.545992	4	13.115
0.1376189E 03	0.3739607E 03	0.3984793E 03	69.796	13.959	0.286632	5	16.393
0.9908215E 02	0.6254427E 02	0.1179331E 03	32.028	5.338	0.084831	6	19.672
0.5176590E 02	0.7237683E 02	0.8896376E 02	54.427	7.775	0.064007	7	22.951
-0.5429565E 01	0.3235452E 02	0.3260693E 02	99.526	12.441	0.023599	8	26.230
-0.5353316E 02	-0.3262742E 01	0.5363249E 02	183.488	20.388	0.038579	9	29.508
-0.4962911E 01	0.1316620E 02	0.1407051E 02	110.654	11.065	0.010121	10	32.787

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 17 FLT 12.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.725667E 04

ZERO POSITION USED 3.12 LOAD/IN USED -20600.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.9943258E 04							
0.1113858E 04	0.1298612E 04	0.1710869E 04	49.379	49.379	0.317944	1	3.279
-0.2957384E 04	0.4495496E 04	0.5381039E 04	123.339	61.670	1.000000	2	6.557
0.5534071E 01	0.6770857E 03	0.6771084E 03	89.532	29.844	0.125832	3	9.836
0.7554404E 03	0.2702961E 03	0.8023403E 03	19.687	4.922	0.149105	4	13.115
0.4373674E 03	-0.3603792E 02	0.4388496E 03	355.290	71.058	0.081555	5	16.393
0.1152276E 03	0.1355366E 03	0.1778976E 03	49.630	8.272	0.033060	6	19.672
0.4121115E 02	0.1316725E 03	0.1381619E 03	72.646	10.378	0.025676	7	22.951
-0.1294384E 03	0.2559180E 02	0.1319440E 03	168.816	21.102	0.024520	8	26.230
-0.3193623E 03	0.6771082E 02	0.3284614E 03	168.029	18.670	0.060669	9	29.508
0.2565479E 02	0.1208094E 03	0.1235034E 03	78.011	7.801	0.022952	10	32.787

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 017 CTR 17 FLT 12.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.482681E 04

ZERO POSITION USED 1.25 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.3160533E 04							
0.3036519E 03	0.7839714E 03	0.8407234E 03	68.827	68.827	0.274602	1	3.279
-0.1428838E 04	0.2707736E 04	0.3061603E 04	117.820	58.910	1.000000	2	6.557
0.1029865E 03	0.4189558E 03	0.4314280E 03	76.189	25.396	0.140916	3	9.836
0.7262612E 03	0.2155191E 03	0.7575645E 03	16.528	4.132	0.247440	4	13.115
0.3400410E 03	-0.9388129E 02	0.3527627E 03	344.566	68.913	0.115222	5	16.393
0.1074236E 03	0.1409874E 03	0.1772492E 03	52.695	8.782	0.057894	6	19.672
-0.9688931E 01	0.6336957E 02	0.6410596E 02	98.693	14.099	0.020939	7	22.951
-0.6729671E 02	0.1360571E 03	0.1515858E 03	115.987	14.498	0.050165	8	26.230
-0.3474658E 03	0.1073372E 03	0.3636670E 03	162.833	18.093	0.118783	9	29.508
-0.7965676E 02	-0.4348062E 02	0.9057559E 02	208.689	20.869	0.029584	10	32.787

Table III. (Continued)

TEST 13 N = 1

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 010 16 13.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = C.572479E 04

ZERO POSITION USED 9.51 LOAD/IN USED -41400.00 (FACTOR THESE NUMBERS BY 0.038)

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1308884E 05							
-0.2785828E 04	0.2727302E 04	0.3898591E 04	135.608	135.608	1.000000	1	2.519
-0.3633736E 03	0.2448338E 03	0.4381599E 03	146.029	73.014	0.112389	2	5.038
0.6786830E 03	0.5721680E 03	0.8876845E 03	40.183	13.395	0.227694	3	7.557
0.9369510E 02	-0.5980302E 02	0.1111143E 03	327.449	81.862	0.028509	4	10.076
-0.2648335E 03	-0.2099816E 03	0.3379939E 03	218.412	43.682	0.086694	5	12.594
0.8111365E 03	-0.4424382E 03	0.9239555E 03	331.339	55.232	0.236997	6	15.113
0.1293723E 03	0.9177344E 03	0.9268083E 03	81.975	11.711	0.237729	7	17.632
-0.2070160E 02	0.6535297E 02	0.6855336E 02	107.577	13.447	0.017584	8	20.151
0.5637424E 02	-0.3557768E 02	0.6666202E 02	327.744	36.416	0.017099	9	22.670
0.1033628E 02	-0.2624294E 02	0.2822351E 02	291.592	29.159	0.007239	10	25.189

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 16 FLT 13.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = C.241155E 04

ZERO POSITION USED 3.75 LOAD/IN USED 25900.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.8981617E 04							
-0.1028918E 03	-0.3421287E 03	0.3572655E 03	253.262	253.262	0.306775	1	2.519
-0.1083974E 04	-0.4257441E 03	0.1164584E 04	201.443	100.722	1.000000	2	5.038
0.3955071E 03	0.2477183E 03	0.4666799E 03	32.060	10.687	0.400727	3	7.557
-0.6424684E 02	0.2277087E 02	0.6816281E 02	160.484	40.121	0.058530	4	10.076
-0.4922931E 02	-0.2541774E 02	0.5540430E 02	207.308	41.462	0.047574	5	12.594
0.7555652E 03	-0.1649745E 03	0.7733662E 03	347.633	57.947	0.664070	6	15.113
-0.1793246E 03	0.7204272E 03	0.7424102E 03	103.978	14.854	0.637489	7	17.632
-0.2203283E 03	0.6013216E 02	0.2283871E 03	164.735	20.592	0.196110	8	20.151
-0.4493967E 02	-0.1097385E 03	0.1186300E 03	247.739	27.527	0.101865	9	22.670
-0.8702148E 01	-0.8169693E 02	0.8215907E 02	263.920	26.392	0.070548	10	25.189

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 16 FLT 13.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = C.212290E 04

ZERO POSITION USED 8.27 LOAD/IN USED -30400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.8886121E 04							
0.3946519E 03	-0.8744790E 03	0.9553379E 03	293.743	293.743	0.908262	1	2.519
-0.8969543E 03	-0.5493818E 03	0.1051830E 04	211.487	105.744	1.000000	2	5.038
0.3356859E 03	0.3385703E 03	0.5132087E 03	41.278	13.759	0.487920	3	7.557
0.1937853E 03	0.1046113E 02	0.1940674E 03	3.090	0.773	0.184504	4	10.076
-0.1838751E 03	-0.1700223E 03	0.2504349E 03	222.758	44.552	0.238094	5	12.594
0.5289424E 03	0.4328993E 01	0.5289503E 03	0.469	0.078	0.502695	6	15.113
0.5320572E 02	0.5542627E 03	0.5561105E 03	84.517	12.074	0.529873	7	17.632
-0.1029275E 03	0.7259669E 02	0.1265328E 03	144.434	18.054	0.120298	8	20.151
-0.9997270E 02	-0.4850922E 02	0.1111201E 03	235.884	22.876	0.105645	9	22.670
-0.6651703E 02	-0.6718088E 02	0.9453984E 02	225.234	22.528	0.089881	10	25.189

Table III. (Continued)

TEST 13 N = 1 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 16 FLT 13.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.212997E 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2157001E 04							
0.6800452E 03	-0.1080838E 04	0.1276978E 04	302.177	302.177	1.000000	1	2.519
-0.4057908E 03	0.3363752E 03	0.5270811E 03	140.343	70.172	0.412757	2	5.038
0.1457516E 03	0.2688247E 03	0.3057944E 03	61.534	20.511	0.239467	3	7.557
-0.3450718E 03	-0.2831174E 03	0.4463518E 03	219.357	54.842	0.349538	4	10.076
-0.2338017E 02	0.1390232E 03	0.1409754E 03	99.546	19.909	0.110398	5	12.594
-0.4393458E 03	0.1156471E 03	0.4550625E 03	164.887	27.481	0.356375	6	15.113
0.2135715E 02	-0.4238071E 03	0.4243450E 03	272.885	38.984	0.332304	7	17.632
0.1167290E 03	-0.3633241E 02	0.1222527E 03	342.711	42.839	0.095736	8	20.151
0.6337608E 02	0.1810381E 02	0.6591110E 02	15.942	1.771	0.051615	9	22.670
0.2308496E 02	0.3823907E 02	0.4406701E 02	58.881	5.888	0.034579	10	25.189

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 16 FLT 13.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.459931E 04

ZERO POSITION USED 3.11 LOAD/IN USED -20300.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.6522574E 04							
0.7225210E 03	0.5057700E 03	0.8819524E 03	34.992	34.992	0.446470	1	2.519
0.1650806E 04	-0.1084895E 04	0.1975388E 04	326.687	163.344	1.000000	2	5.038
0.8018835E 02	-0.7666189E 03	0.7708013E 03	275.971	91.990	0.390203	3	7.557
-0.1167936E 04	0.5482673E 03	0.1290221E 04	154.853	38.713	0.653148	4	10.076
-0.4520432E 02	-0.2613872E 02	0.5221745E 02	210.038	42.008	0.026434	5	12.594
-0.2152224E 03	0.9448561E 01	0.2154297E 03	177.486	29.591	0.109057	6	15.113
0.1423006E 03	-0.3554131E 03	0.3828418E 03	291.820	41.689	0.193806	7	17.632
-0.9508354E 01	-0.3647514E 02	0.3769409E 02	255.389	31.924	0.019082	8	20.151
-0.2940245E 02	0.2787456E 02	0.4051537E 02	136.528	15.170	0.020510	9	22.670
-0.2897385E 02	0.5973296E 02	0.6638907E 02	115.876	11.598	0.033608	10	25.189

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 16 FLT 13.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.266480E 04

ZERO POSITION USED 1.15 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.5528107E 02							
0.2613540E 03	0.4452178E 03	0.5162603E 03	59.586	59.586	0.396013	1	2.519
0.1010426E 04	-0.8237261E 03	0.1303643E 04	320.812	160.406	1.000000	2	5.038
0.3640120E 02	-0.4457598E 03	0.4472434E 03	274.668	91.556	0.343072	3	7.557
-0.7883643E 03	0.5193970E 03	0.9440823E 03	146.622	36.655	0.724188	4	10.076
-0.2924215E 02	-0.1110417E 03	0.1148275E 03	255.246	51.049	0.088082	5	12.594
-0.4320915E 02	0.4437895E 02	0.6193967E 02	134.235	22.372	0.047513	6	15.113
0.1231291E 03	-0.2235490E 03	0.2552155E 03	298.846	42.692	0.195771	7	17.632
0.8687947E 01	-0.9140114E 02	0.9181310E 02	275.430	34.429	0.070428	8	20.151
0.2451776E 02	0.7165486E 02	0.7592256E 02	71.160	7.907	0.058239	9	22.670
-0.2920833E 02	0.5600676E 02	0.6316553E 02	117.543	11.754	0.048453	10	25.189

Table III. (Continued)

TEST 13 M = 2

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 17 FLT 13.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.366645E 04

ZERO POSITION USED 9.51 LOAD/IN USED -41450.00 (FACTOR THESE NUMBERS BY 0.638)

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1390564E 05							
-0.2074545E 03	0.2502807E 04	0.2511390E 04	94.738	94.738	1.000000	1	2.577
-0.2364080E 03	-0.1654967E 03	0.2885791E 03	214.994	107.497	0.114908	2	5.155
0.6342837E 03	0.4883022E 03	0.7825322E 03	35.850	11.950	0.311593	3	7.732
-0.2679762E 02	-0.2506529E 03	0.2520912E 03	263.898	65.974	0.100379	4	10.309
-0.3664333E 02	-0.1752368E 03	0.1790269E 03	258.189	51.638	0.071286	5	12.887
0.6145869E 03	0.1192406E 03	0.6260474E 03	10.980	1.830	0.249283	6	15.464
-0.4638576E 02	0.7008523E 03	0.7023360E 03	93.787	13.398	0.279680	7	18.041
-0.1761754E 03	-0.1332410E 03	0.2208867E 03	217.100	27.138	0.087954	8	20.619
0.6636436E 02	-0.1231886E 03	0.1399275E 03	298.312	33.146	0.055717	9	23.196
-0.5879340E 01	-0.1183875E 03	0.1185334E 03	267.157	26.716	0.047198	10	25.773

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 17 FLT 13.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.289385E 04

ZERO POSITION USED 3.75 LOAD/IN USED 25900.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.9274914E 04							
0.1416469E 04	-0.2124495E 03	0.1432311E 04	351.470	351.470	1.000000	1	2.577
-0.1143421E 04	-0.5851362E 03	0.1264443E 04	207.101	103.550	0.896763	2	5.155
0.4343503E 03	0.1661719E 03	0.4650518E 03	20.936	6.979	0.324686	3	7.732
-0.4629235E 02	-0.2557928E 03	0.2599480E 03	259.742	64.935	0.181489	4	10.309
-0.1002129E 03	-0.1275808E 03	0.1622323E 03	231.851	46.370	0.113266	5	12.887
0.4947129E 03	-0.2135260E 03	0.5388267E 03	336.654	56.109	0.376194	6	15.464
0.1791538E 03	0.6123223E 03	0.6379941E 03	73.691	10.527	0.445430	7	18.041
-0.1202216E 03	0.6428722E 02	0.1363307E 03	151.865	18.983	0.095182	8	20.619
-0.5123520E 02	-0.2664594E 02	0.5774989E 02	207.478	23.053	0.040319	9	23.196
-0.8645789E 02	-0.7103928E 02	0.1118997E 03	219.409	21.941	0.078125	10	25.773

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 17 FLT 13.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.330230E 04

ZERO POSITION USED 8.27 LOAD/IN USED -30400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.9081754E 04							
0.1858569E 04	-0.7013320E 03	0.1986491E 04	339.326	339.326	1.000000	1	2.577
-0.6349434E 03	-0.1079583E 04	0.1252458E 04	239.539	119.769	0.630488	2	5.155
0.3942627E 03	0.3235864E 03	0.5100503E 03	39.377	13.126	0.256759	3	7.732
0.1396182E 03	-0.2359117E 03	0.2600439E 03	294.931	73.733	0.130906	4	10.309
0.7583359E 01	-0.1699686E 03	0.1700371E 03	272.551	54.510	0.085597	5	12.887
0.5809733E 03	0.1318298E 03	0.5956448E 03	12.707	2.131	0.299848	6	15.464
-0.8944575E 02	0.3714189E 03	0.3820383E 03	103.541	14.792	0.192318	7	18.041
-0.5615158E 02	0.1628746E 03	0.1722821E 03	109.022	13.628	0.086727	8	20.619
-0.8619714E 02	-0.1112889E 03	0.1407664E 03	232.241	25.805	0.070862	9	23.196
0.1317643E 02	-0.1392063E 03	0.1398285E 03	275.407	27.541	0.070390	10	25.773

Table III. (Continued)

TEST 13 N = 2 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 17 FLT 13.0 TR 41 2 FLAP BEND STA 140
OVERALL CYCLIC LOAD = 0.212997E 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2095487E 04							
0.9903705E 03	-0.1141923E 04	0.1511562E 04	310.935	310.935	1.000000	1	2.577
-0.2769858E 03	0.3004922E 03	0.4066768E 03	132.669	66.335	0.270367	2	5.155
0.2011812E 03	0.1593562E 03	0.2566482E 03	38.383	12.794	0.169790	3	7.732
-0.4663604E 03	-0.3656738E 03	0.5926292E 03	218.100	54.525	0.392064	4	10.309
-0.1611105E 02	0.1687844E 03	0.1695516E 03	95.453	19.091	0.112170	5	12.887
-0.3217188E 03	0.1979343E 03	0.3777312E 03	148.699	24.783	0.249895	6	15.464
-0.1466225E 03	-0.3106057E 03	0.3434734E 03	244.730	34.961	0.227231	7	18.041
0.3765463E 02	-0.6532677E 02	0.7540196E 02	299.959	37.495	0.049883	8	20.619
0.3200739E 02	-0.3817393E 02	0.4981688E 02	309.979	34.442	0.032957	9	23.196
0.6820729E 02	0.1642769E 02	0.7015768E 02	13.542	1.354	0.046414	10	25.773

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 17 FLT 13.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.620593E 04

ZERO POSITION USED 3.11 LOAD/IN USED -20300.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.6703230E 04							
0.7617520E 03	0.3565994E 03	0.8410881E 03	25.086	25.086	0.205821	1	2.577
0.3361180E 04	-0.2324224E 04	0.4086508E 04	325.336	162.668	1.000000	2	5.155
0.3939277E 03	-0.3444448E 03	0.5232793E 03	318.834	106.278	0.128050	3	7.732
-0.1505650E 04	0.1441571E 04	0.2084492E 04	136.246	34.061	0.510091	4	10.309
0.8440678E 02	0.9387749E 02	0.1262437E 03	48.041	9.608	0.030893	5	12.887
-0.2194413E 03	0.3546082E 02	0.2229610E 03	169.806	28.301	0.054560	6	15.464
-0.8922546E 02	-0.2377554E 03	0.2539465E 03	249.430	35.633	0.062143	7	18.041
-0.5984483E 02	0.7555435E 02	0.9638391E 02	128.382	16.048	0.023586	8	20.619
0.8186165E 02	-0.1794476E 02	0.8380537E 02	347.636	38.626	0.020508	9	23.196
0.8637418E 02	0.2384494E 02	0.8960510E 02	15.433	1.543	0.021927	10	25.773

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 17 FLT 13.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.372067E 04

ZERO POSITION USED 1.15 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.2369593E 03							
0.2583267E 03	0.3824854E 03	0.4615491E 03	55.965	55.965	0.199540	1	2.577
0.1919953E 04	-0.1497824E 04	0.2435097E 04	322.041	161.020	1.000000	2	5.155
0.1774725E 03	-0.2417200E 03	0.2998750E 03	306.286	102.095	0.123147	3	7.732
-0.9445833E 03	0.1220815E 04	0.1543576E 04	127.730	31.933	0.633887	4	10.309
0.8288823E 02	-0.6402513E 01	0.8313510E 02	355.583	71.117	0.034140	5	12.887
-0.9502332E 02	0.8150113E 02	0.1251873E 03	139.380	23.230	0.051410	6	15.464
0.1254395E 01	-0.1900666E 03	0.1900707E 03	270.378	38.625	0.078055	7	18.041
0.1001993E 02	0.1631903E 03	0.1634977E 03	86.486	10.811	0.067138	8	20.619
0.4281319E 02	0.3771511E 01	0.4297893E 02	5.034	0.559	0.017650	9	23.196
0.1269623E 02	0.1219481E 03	0.1226072E 03	84.056	8.406	0.050350	10	25.773

Table III. (Continued)

TEST 13 N = 3

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 18 FLT 13.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.197473E 05

ZERO POSITION USED 9.51 LOAD/IN USED -41450.00 (FACTOR THESE NUMBERS BY 0.838)

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1054090E 05							
-0.1588189E 05	0.8733465E 04	0.1812478E 05	151.194	151.194	1.000000	1	2.710
0.1499016E 04	0.1018399E 04	0.1812231E 04	34.191	17.096	0.099986	2	5.420
0.4274675E 03	0.9412515E 03	0.9436362E 03	63.064	21.021	0.052063	3	8.130
-0.3819688E 03	0.1166441E 04	0.1229290E 04	108.103	27.026	0.067824	4	10.840
-0.3390662E 03	0.2413162E 03	0.4161721E 03	144.550	28.912	0.022961	5	13.550
0.1741638E 03	0.1374250E 04	0.1385244E 04	82.776	13.796	0.076428	6	16.260
-0.1009342E 03	0.6334785E 03	0.6414692E 03	99.053	14.150	0.035292	7	18.970
-0.1647612E 02	0.3994379E 02	0.4320844E 02	112.415	14.052	0.002384	8	21.680
-0.1035371E 02	0.1513997E 01	0.1066175E 02	171.636	19.093	0.000588	9	24.390
-0.1144477E 02	-0.1535156E 02	0.1914819E 02	233.295	23.329	0.001056	10	27.100

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 18 FLT 13.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.100079E 05

ZERO POSITION USED 3.75 LOAD/IN USED 25900.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.6686117E 04							
-0.7774113E 04	0.4002045E 04	0.8743750E 04	152.761	152.761	1.000000	1	2.710
0.7937542E 03	-0.5367534E 02	0.7955669E 03	356.131	178.066	0.090987	2	5.420
0.2218432E 03	0.4352021E 03	0.4884827E 03	62.990	20.997	0.055866	3	8.130
-0.4075671E 03	0.6625046E 03	0.7778325E 03	121.600	30.400	0.088959	4	10.840
0.9063530E 02	0.1845294E 02	0.9250266E 02	11.532	2.306	0.010579	5	13.550
0.3527224E 03	0.8491487E 03	0.9194924E 03	67.443	11.240	0.105160	6	16.260
-0.1394754E 03	0.2465946E 03	0.2698032E 03	113.939	16.277	0.030857	7	18.970
-0.2240776E 01	0.3314084E 02	0.3321651E 02	93.868	11.734	0.003799	8	21.680
0.4479688E 02	-0.1154866E 03	0.1238700E 03	291.201	32.356	0.014167	9	24.390
0.3638541E 02	-0.3271202E 02	0.4892825E 02	318.043	31.804	0.005596	10	27.100

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 18 FLT 13.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.919927E 04

ZERO POSITION USED 8.27 LOAD/IN USED -30400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.6956453E 04							
-0.7223793E 04	0.3348394E 04	0.7962094E 04	155.131	155.131	1.000000	1	2.710
0.3772559E 03	-0.4200389E 03	0.5645835E 03	311.928	155.964	0.070909	2	5.420
0.3522664E 03	0.3477251E 03	0.5021450E 03	43.827	14.609	0.063067	3	8.130
-0.1058319E 03	0.6457053E 03	0.6543209E 03	99.308	24.827	0.082179	4	10.840
0.4968960E 01	0.1512600E 03	0.1513416E 03	88.118	17.624	0.019008	5	13.550
0.1853716E 03	0.6457905E 03	0.6718691E 03	73.994	12.331	0.084383	6	16.260
-0.1502926E 03	0.2402255E 03	0.2833657E 03	122.031	17.433	0.035589	7	18.970
0.1344509E 01	0.2802344E 02	0.2805565E 02	87.253	10.907	0.003524	8	21.680
-0.3806575E 02	0.9509439E 01	0.3923558E 02	165.974	18.442	0.004928	9	24.390
0.3591699E 02	-0.9486501E 02	0.1014367E 03	290.737	29.074	0.012740	10	27.100

Table III. (Continued)

TEST 13 N = 3 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 18 FLT 13.0 TR 41 2 FLAP BEND STA 116
OVERALL CYCLIC LOAD = 0.272284E 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1790032E 04							
-0.7805186E 03	-0.3754067E 03	0.8661060E 03	205.636	205.636	0.706500	1	2.710
0.4792139E 03	0.6710591E 03	0.8246006E 03	54.459	27.234	0.672644	2	5.420
-0.7542691E 02	0.1448429E 03	0.1633055E 03	117.503	39.169	0.133212	3	8.130
-0.9102266E 03	0.8211846E 03	0.1225910E 04	137.944	34.486	1.000000	4	10.840
-0.7293714E 02	0.1432192E 03	0.1607447E 03	117.004	23.401	0.131123	5	13.550
-0.3941621E 03	-0.3951479E 03	0.5581270E 03	225.072	37.512	0.455276	6	16.260
0.4438402E 02	-0.1455217E 03	0.1521397E 03	286.952	40.995	0.124103	7	18.970
0.2068005E 00	0.3590338E 02	0.3590398E 02	89.670	11.209	0.029288	8	21.680
0.3450438E 02	-0.1722301E 02	0.3856403E 02	333.474	37.053	0.031457	9	24.390
-0.1761520E 02	0.5163539E 02	0.5455739E 02	108.837	10.884	0.044504	10	27.100

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 18 FLT 13.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.119078E 05

ZERO POSITION USED 3.11 LOAD/IN USED -20300.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.6607047E 04							
0.1392377E 04	0.1951722E 03	0.1405989E 04	7.979	7.979	0.148657	1	2.710
-0.9032512E 04	-0.2761590E 04	0.9445242E 04	197.000	98.500	1.000000	2	5.420
0.1192038E 03	-0.1609091E 03	0.2002530E 03	306.531	102.177	0.021201	3	8.130
0.3920167E 04	0.1106356E 04	0.4073294E 04	15.760	3.940	0.431254	4	10.840
-0.4666493E 02	0.9598286E 02	0.1066355E 03	115.952	23.190	0.011290	5	13.550
-0.9133454E 02	0.9550439E 02	0.1321825E 03	133.737	22.290	0.013995	6	16.260
0.3088220E 03	0.7116466E 02	0.3169155E 03	12.977	1.854	0.033553	7	18.970
-0.6346109E 01	0.1532156E 03	0.1533469E 03	92.372	11.546	0.016235	8	21.680
-0.6015591E 02	0.2738815E 02	0.6609723E 02	155.521	17.280	0.006998	9	24.390
-0.5313983E 02	0.1428827E 03	0.1524444E 03	110.401	11.040	0.016140	10	27.100

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 18 FLT 13.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.746648E 04

ZERO POSITION USED 1.15 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1270944E 02							
0.7274475E 03	0.2966099E 03	0.7855935E 03	22.183	22.183	0.146540	1	2.710
-0.5152426E 04	-0.1426887E 04	0.5346352E 04	195.479	97.740	1.000000	2	5.420
-0.5089307E 02	-0.4358372E 02	0.6700491E 02	220.576	73.525	0.012533	3	8.130
0.2941382E 04	0.6962952E 03	0.3022673E 04	13.318	3.330	0.565171	4	10.840
-0.9170914E 02	0.7569981E 02	0.1189160E 03	140.463	28.093	0.022242	5	13.550
0.8002414E 02	0.7126588E 02	0.9317574E 02	49.894	8.316	0.017428	6	16.260
0.2560938E 03	-0.6122173E 02	0.2633098E 03	346.555	49.508	0.049250	7	18.970
0.6780441E 02	0.1200368E 03	0.1378532E 03	60.539	7.567	0.025786	8	21.680
-0.5327649E 02	0.1807729E 02	0.5625986E 02	161.257	17.917	0.010523	9	24.390
0.4831520E 02	0.3986926E 02	0.6264117E 02	39.529	3.953	0.011717	10	27.100

Table III. (Continued)

TEST 13 N = 4

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 19 FLT 13.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.585343E 04

ZERO POSITION USED 9.51 LOAD/IN USED -41450.00 (FACTOR THESE NUMBERS BY 0.638)

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1330021E 05							
-0.2424969E 04	0.3465516E 04	0.4229688E 04	124.982	124.982	1.000000	1	2.538
-0.4056626E 03	0.4767295E 03	0.6259658E 03	130.395	65.198	0.147993	2	5.076
0.7847153E 03	0.3549731E 03	0.8612688E 03	24.340	8.113	0.203625	3	7.614
-0.2002550E 02	-0.9561218E 02	0.9763675E 02	258.170	64.543	0.023096	4	10.152
-0.7199283E 02	-0.1176170E 03	0.1379011E 03	238.529	47.706	0.032603	5	12.690
0.8364185E 03	-0.1457007E 03	0.8490139E 03	350.118	58.353	0.200727	6	15.228
0.1979574E 03	0.8130637E 03	0.8368152E 03	76.316	10.902	0.197843	7	17.766
-0.1889029E 03	0.9797449E 02	0.2127987E 03	152.587	19.073	0.050311	8	20.305
-0.1317951E 03	-0.1193269E 03	0.1777868E 03	222.138	24.684	0.042034	9	22.843
-0.5884407E 02	-0.6587814E 02	0.8701251E 02	229.210	22.921	0.020572	10	25.381

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 19 FLT 13.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.257232E 04

ZERO POSITION USED 3.75 LOAD/IN USED 25900.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.9091008E 04							
0.2033717E 03	0.3046855E 03	0.3663240E 03	56.278	56.278	0.283578	1	2.538
-0.1201279E 04	-0.4750381E 03	0.1291794E 04	201.576	100.788	1.000000	2	5.076
0.3188335E 03	0.1095394E 03	0.3371255E 03	18.961	6.320	0.260975	3	7.614
-0.9618727E 02	-0.6620372E 02	0.1167686E 03	214.539	53.635	0.090393	4	10.152
0.1533420E 02	-0.4461638E 02	0.4717795E 02	288.967	57.793	0.036521	5	12.690
0.4929070E 03	-0.3649187E 03	0.6253955E 03	322.013	53.669	0.484130	6	15.228
0.2169361E 03	0.4536692E 03	0.5392314E 03	66.278	9.468	0.417428	7	17.766
-0.4949414E 02	-0.3665755E 02	0.6159096E 02	216.525	27.066	0.047679	8	20.305
-0.9685632E 02	-0.4188324E 02	0.1055242E 03	203.385	22.598	0.081688	9	22.843
-0.1136276E 03	-0.7889073E 02	0.1383292E 03	214.772	21.477	0.107083	10	25.381

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 19 FLT 13.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.226444E 04

ZERO POSITION USED 8.27 LOAD/IN USED -30400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.8756789E 04							
0.2841011E 03	-0.3936357E 03	0.4854507E 03	305.819	305.819	0.409099	1	2.538
-0.8077415E 03	-0.8692813E 03	0.1186632E 04	227.102	113.551	1.000000	2	5.076
0.4210554E 03	0.1546009E 03	0.4638503E 03	24.805	8.268	0.390896	3	7.614
-0.1192256E 03	-0.1018042E 03	0.1567754E 03	220.493	55.123	0.132119	4	10.152
0.5063194E 02	0.4141902E 02	0.6541502E 02	39.295	7.857	0.055127	5	12.690
0.5629551E 03	-0.2834380E 03	0.6302823E 03	333.275	55.546	0.531152	6	15.228
0.4752104E 02	0.4446230E 03	0.4473508E 03	83.902	11.986	0.376995	7	17.766
-0.1451822E 01	0.1607240E 03	0.1607305E 03	90.518	11.315	0.135451	8	20.305
-0.5527594E 02	-0.1462212E 03	0.1563204E 03	249.292	27.699	0.131734	9	22.843
-0.8007085E 02	-0.3445757E 02	0.8717029E 02	203.284	20.328	0.073460	10	25.381

Table III. (Continued)

TEST 13 N = 4 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 19 FLT 13.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = C.199822E 04

ZERO POSITION USED 0.39 LCAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2088389E 04							
0.6502854E 03	-0.5880068E 03	0.1182805E 04	303.352	303.352	1.000000	1	2.538
-0.3652156E 03	0.3665002E 03	0.5174019E 03	134.899	67.450	0.437436	2	5.076
0.1896021E 03	0.6258501E 02	0.1999800E 03	18.539	6.180	0.169073	3	7.614
-0.4999270E 03	-0.1857648E 03	0.5333250E 03	200.384	50.096	0.450898	4	10.152
0.1299773E 02	0.1187659E 03	0.1194750E 03	83.754	16.751	0.101010	5	12.690
-0.3080444E 03	0.3094414E 03	0.4366294E 03	134.870	22.478	0.369147	6	15.228
-0.1578776E 03	-0.3163496E 03	0.3535566E 03	243.478	34.783	0.298914	7	17.766
0.4070712E 02	-0.9878004E 02	0.1068390E 03	292.396	36.550	0.090327	8	20.305
0.2643202E 02	0.7141092E 01	0.2737968E 02	15.119	1.680	0.023148	9	22.843
0.6125764E 02	0.6149868E 01	0.6156557E 02	5.733	0.573	0.052050	10	25.381

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 19 FLT 13.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = C.478833E 04

ZERO POSITION USED 3.11 LCAD/IN USED -20300.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.6647551E 04							
0.8082224E 03	0.3088811E 03	0.8652346E 03	20.916	20.916	0.312952	1	2.538
0.1990349E 04	-0.1518943E 04	0.2764747E 04	316.046	158.023	1.000000	2	5.076
0.3226898E 02	-0.4231531E 03	0.4343533E 03	274.260	91.420	0.157104	3	7.614
-0.7460408E 03	0.1320055E 04	0.1516286E 04	119.473	29.868	0.548436	4	10.152
0.1996565E 03	0.2037592E 02	0.2006935E 03	5.827	1.165	0.072590	5	12.690
-0.1972100E 03	0.2107454E 02	0.1983323E 03	173.900	28.983	0.071736	6	15.228
-0.5613844E 02	-0.1638980E 03	0.1732457E 03	251.093	35.870	0.062662	7	17.766
-0.1167831E 03	0.1491146E 02	0.1177312E 03	172.724	21.590	0.042583	8	20.305
0.2547319E 02	0.6750412E 02	0.7215045E 02	69.326	7.703	0.026097	9	22.843
0.3921928E 02	-0.8074760E 01	0.4004190E 02	348.366	34.837	0.014483	10	25.381

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 19 FLT 13.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.239106E 04

ZERO POSITION USED 1.15 LCAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.2461603E 03							
0.2940027E 03	0.3349758E 03	0.4456975E 03	48.727	48.727	0.258306	1	2.538
0.1160490E 04	-0.1276909E 04	0.1725465E 04	312.265	156.133	1.000000	2	5.076
0.1167390E 02	-0.2097680E 03	0.2100926E 03	273.185	91.062	0.121760	3	7.614
-0.3687693E 03	0.1044851E 04	0.1108024E 04	109.441	27.360	0.642160	4	10.152
0.6384998E 02	0.4166829E 01	0.6398579E 02	3.734	0.747	0.037083	5	12.690
-0.8928346E 02	0.5173950E 01	0.8943324E 02	176.683	29.447	0.051831	6	15.228
-0.3764646E 01	-0.2049675E 03	0.2050062E 03	268.892	38.413	0.118812	7	17.766
-0.5124385E 02	0.1966302E 02	0.5488636E 02	159.007	19.876	0.031810	8	20.305
-0.1564981E 02	-0.2443506E 02	0.2901704E 02	237.362	26.374	0.016817	9	22.843
-0.1620096E 02	0.9577576E 02	0.9713631E 02	99.601	9.960	0.056296	10	25.381

Table III. (Continued)

TEST 13 N = 5

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 20 FLT 13.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.611073E 04

ZERO POSITION USED 9.51 LOAD/IN USED -41450.00 (FACTOR THESE NUMBERS BY 0.638)

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1350764E 05							
-0.2976708E 04	0.2765595E 04	0.4063165E 04	137.106	137.106	1.000000	1	2.551
0.1052549E 03	0.4302200E 03	0.4429092E 03	76.252	38.126	0.109006	2	5.102
0.7407317E 03	0.5908655E 03	0.9475259E 03	38.579	12.860	0.233199	3	7.653
0.1144325E 02	-0.4653754E 02	0.4792350E 02	283.514	70.954	0.011795	4	10.204
-0.5162292E 02	-0.1950155E 03	0.2017324E 03	255.173	51.035	0.049649	5	12.755
0.7305211E 03	-0.6129102E 02	0.7331873E 03	355.205	59.201	0.180447	6	15.306
-0.1550411E 03	0.8416246E 03	0.8557861E 03	100.438	14.343	0.210621	7	17.857
-0.5477550E 02	0.6798459E 02	0.8730553E 02	128.459	16.107	0.021487	8	20.408
0.1950964E 02	-0.7121179E 02	0.7383591E 02	285.321	31.702	0.018172	9	22.959
0.4314583E 02	-0.1737999E 03	0.1790753E 03	283.942	28.394	0.044073	10	25.510

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 20 FLT 13.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.229096E 04

ZERO POSITION USED 3.75 LOAD/IN USED 25900.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.9402930E 04							
-0.4618398E 03	0.9925085E 02	0.4723840E 03	167.871	167.871	0.617411	1	2.551
-0.6788687E 03	-0.3528777E 03	0.7651047E 03	207.466	103.733	1.000000	2	5.102
0.3199326E 03	0.2737437E 03	0.4210610E 03	40.551	13.517	0.550331	3	7.653
-0.3567458E 02	0.2923631E 02	0.5302983E 02	132.278	33.069	0.069311	4	10.204
-0.1011863E 03	-0.5850705E 02	0.1168834E 03	210.037	42.007	0.152768	5	12.755
0.5649775E 03	-0.2604057E 03	0.6221023E 03	335.254	55.876	0.813094	6	15.306
0.1459553E 03	0.7200417E 03	0.7346855E 03	78.541	11.220	0.960242	7	17.857
0.6675705E 02	-0.3803819E 01	0.6685531E 02	356.739	44.592	0.087394	8	20.408
-0.2272412E 03	0.2390462E 02	0.2284951E 03	173.995	19.333	0.298645	9	22.959
-0.1657378E 02	-0.7108875E 02	0.7299518E 02	256.676	25.688	0.095405	10	25.510

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 20 FLT 13.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.193421E 04

ZERO POSITION USED 8.27 LOAD/IN USED -30400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.8941844E 04							
-0.7060004E 02	-0.5709592E 03	0.5753076E 03	262.951	262.951	0.873806	1	2.551
-0.3227285E 03	-0.5055898E 03	0.5998123E 03	237.449	118.725	0.911025	2	5.102
0.4575050E 03	0.2467868E 03	0.5198252E 03	28.343	9.448	0.789537	3	7.653
0.1296508E 03	-0.6819588E 02	0.1568057E 03	325.774	81.443	0.238164	4	10.204
0.1285559E 03	0.2118672E 01	0.1287014E 03	2.725	0.545	0.195478	5	12.755
0.6530273E 03	0.8388210E 02	0.6583926E 03	7.320	1.220	1.000000	6	15.306
-0.7216254E 01	0.4976584E 03	0.4979106E 03	90.830	12.976	0.756252	7	17.857
-0.6892903E 02	0.1264407E 03	0.1443599E 03	118.521	14.815	0.219261	8	20.408
-0.1083625E 03	-0.4257921E 02	0.1164277E 03	201.451	22.383	0.176836	9	22.959
-0.1142849E 03	-0.6381564E 02	0.1308949E 03	209.179	20.918	0.198810	10	25.510

Table III. (Continued)

TEST 13 N = 5 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 20 FLT 13.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = C.204213E C4

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2094626E 04							
0.4967498E 03	-0.1140440E 04	0.1243930E 04	293.537	293.537	1.000000	1	2.551
-0.1504324E 03	0.3554678E 03	0.3859985E 03	112.938	56.469	0.310297	2	5.102
0.1809923E 03	0.1917109E 03	0.2636499E 03	46.647	15.549	0.211949	3	7.653
-0.4502085E 03	-0.1427752E 03	0.4723054E 03	197.595	49.399	0.379688	4	10.204
0.5703157E 02	0.8678694E 02	0.1033323E 03	56.703	11.341	0.083471	5	12.755
-0.3132698E 03	0.2823079E 03	0.4217056E 03	137.976	22.996	0.339011	6	15.306
-0.1266669E 03	-0.3065952E 03	0.3318069E 03	247.521	35.360	0.266741	7	17.857
0.1703342E 02	-0.3780566E 02	0.4146571E 02	294.254	36.782	0.033334	8	20.408
0.6588341E 02	-0.1665163E 02	0.6875175E 02	343.391	38.155	0.055270	9	22.959
0.7038443E 02	-0.2563116E 02	0.7490607E 02	339.990	33.999	0.060217	10	25.510

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 20 FLT 13.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = C.406379E C4

ZERO POSITION USED 3.11 LOAD/IN USED -20300.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.6823090E 04							
0.7564404E 03	0.1867172E 03	0.7791440E 03	13.966	13.866	0.361673	1	2.551
0.1427027E 04	-0.1613852E 04	0.2154280E 04	311.484	155.742	1.000000	2	5.102
0.7508105E 03	-0.3754204E 03	0.8394385E 03	333.434	111.145	0.389661	3	7.653
-0.7392686E 03	0.9298438E 03	0.1187909E 04	128.486	32.122	0.551418	4	10.204
-0.3582008E 02	0.5C84697E 02	0.6219720E 02	125.164	25.033	0.028871	5	12.755
-0.1983775E 03	0.1198188E 02	0.1987390E 03	176.544	29.424	0.092253	6	15.306
-0.8363010E 02	-0.2929004E 03	0.3046055E 03	254.065	36.295	0.141395	7	17.857
-0.8584570E 02	0.1881976E 02	0.8788438E 02	167.635	20.954	0.040795	8	20.408
0.4496562E 01	0.9353178E 02	0.9363982E 02	87.247	9.694	0.043467	9	22.959
-0.2037141E 02	0.3C86935E 02	0.3698529E 02	123.422	12.342	0.017168	10	25.510

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 20 FLT 13.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.274022E C4

ZERO POSITION USED 1.15 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1727421E 03							
0.2009563E 03	0.3265154E 03	0.3834016E 03	58.389	58.389	C.280791	1	2.551
0.7962834E 03	-0.1109208E 04	0.1365434E 04	305.674	152.837	1.000000	2	5.102
0.4799033E 03	-0.2491748E 03	0.5407358E 03	332.561	110.854	0.396018	3	7.653
-0.3996602E 03	0.8C79502E 03	0.9013943E 03	116.320	29.080	0.660152	4	10.204
-0.7902295E 02	-0.4304222E 02	0.8998474E 02	208.576	41.715	C.065902	5	12.755
-0.9712933E 02	0.195105CE 01	0.9714891E 02	178.849	29.808	0.071149	6	15.306
-0.3736657E 01	-0.1892898E 03	0.1893267E 03	268.869	38.410	0.138657	7	17.857
-0.1430825E 03	0.3470531E 02	0.1472313E 03	166.366	20.796	0.107827	8	20.408
0.5383351E 02	0.6560095E 02	0.8486183E 02	50.627	5.625	0.062150	9	22.959
-0.7306520E 02	0.8126382E 02	0.1138134E 03	129.939	12.994	0.083353	10	25.510

Table III. (Continued)

TEST 13 N = 6

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 21 FLT 13.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.149674E 05

ZERO POSITION USED 9.51 LOAD/IN USED -41450.00 (FACTOR THESE NUMBERS BY 0.638)

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1201654E 05							
-0.1166902E 05	0.3661545E 04	0.1223000E 05	162.579	162.579	1.000000	1	2.611
0.7339137E 02	0.2821988E 04	0.2822942E 04	88.510	44.255	0.230821	2	5.222
0.4026587E 03	0.1119066E 04	0.1189317E 04	70.209	23.403	0.097246	3	7.833
-0.4448090E 02	0.4696496E 03	0.4719504E 03	95.408	23.852	0.038590	4	10.444
0.2015209E 03	0.7066476E 02	0.2136613E 03	19.331	3.866	0.017462	5	13.055
0.1335720E 04	-0.1513104E 03	0.1344263E 04	353.537	58.923	0.109915	6	15.666
-0.3916233E 03	0.6494654E 03	0.7584194E 03	121.089	17.298	0.062013	7	18.277
0.2200694E 02	0.1625725E 03	0.1640552E 03	82.291	10.286	0.013414	8	20.888
-0.2675726E 02	-0.1210140E 03	0.1239368E 03	257.532	28.615	0.010134	9	23.499
-0.4846028E 01	0.1793706E 02	0.1858014E 02	105.119	10.512	0.001519	10	26.110

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 21 FLT 13.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.671213E 04

ZERO POSITION USED 3.75 LOAD/IN USED 25600.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.8072313E 04							
-0.5485715E 04	0.1202212E 04	0.5615902E 04	167.639	167.639	1.000000	1	2.611
0.4517252E 02	0.9319015E 03	0.9329961E 03	87.225	43.612	0.166135	2	5.222
0.3370537E 03	0.5022305E 03	0.6048477E 03	56.134	18.711	0.107703	3	7.833
0.3673393E 02	0.2354814E 03	0.2383294E 03	81.134	20.283	0.042438	4	10.444
0.1050469E 03	-0.3090158E 02	0.1094977E 03	343.608	68.722	0.019498	5	13.055
0.6683630E 03	-0.3887788E 03	0.7733135E 03	329.801	54.967	0.137701	6	15.666
0.8246104E 02	0.4827795E 03	0.4897712E 03	80.307	11.472	0.087211	7	18.277
-0.8851627E 02	0.1541352E 03	0.1777436E 03	119.868	14.983	0.031650	8	20.888
-0.7745181E 02	-0.3450238E 02	0.8478912E 02	204.011	22.668	0.015098	9	23.499
0.1231000E 02	-0.5289757E 02	0.5431104E 02	283.100	28.310	0.009671	10	26.110

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 21 FLT 13.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.542520E 04

ZERO POSITION USED 8.27 LOAD/IN USED -30400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.8001914E 04							
-0.4722363E 04	0.2682556E 03	0.4729973E 04	176.749	176.749	1.000000	1	2.611
-0.4477385E 03	0.4605056E 03	0.5422891E 03	134.195	67.097	0.135791	2	5.222
0.2791299E 03	0.4956016E 03	0.5688003E 03	60.611	20.204	0.120255	3	7.833
0.7971255E 02	0.2003922E 03	0.2156644E 03	68.308	17.077	0.045595	4	10.444
0.1360178E 02	-0.1192145E 03	0.1199879E 03	276.509	55.302	0.025368	5	13.055
0.5956353E 03	-0.1406245E 03	0.6120103E 03	346.716	57.786	0.129390	6	15.666
-0.9752951E 02	0.4549879E 03	0.4652259E 03	102.101	14.586	0.098357	7	18.277
-0.1219305E 03	0.1814479E 03	0.2185544E 03	123.879	15.485	0.046206	8	20.888
0.2277170E 02	0.6335929E 01	0.2363667E 02	15.548	1.728	0.004997	9	23.499
-0.5767578E 01	-0.1009074E 03	0.1010721E 03	256.729	26.673	0.021368	10	26.110

Table III. (Continued)

TEST 13 N = 6 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 21 FLT 13.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.202018E 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1912637E 04							
-0.4582371E 03	-0.8864385E 03	0.9978750E 03	242.664	242.664	1.000000	1	2.611
0.4809181E 02	0.8900762E 03	0.8913745E 03	86.907	43.454	0.893273	2	5.222
0.8686929E 02	0.1689845E 03	0.1900053E 03	62.794	20.931	0.190410	3	7.833
-0.3540183E 03	0.3266284E 03	0.4816794E 03	137.304	34.326	0.482705	4	10.444
-0.1176629E 02	0.1449033E 03	0.1453852E 03	94.642	18.928	0.145695	5	13.055
-0.4214861E 03	0.3375596E 03	0.5399666E 03	141.310	23.552	0.541147	6	15.666
-0.5586604E 02	-0.2764167E 03	0.2820056E 03	258.574	36.939	0.282606	7	18.277
0.5094708E 02	-0.5613390E 02	0.7580644E 02	312.227	39.028	0.075968	8	20.888
0.4559332E 02	0.3690497E 01	0.4574243E 02	4.628	0.514	0.045840	9	23.499
0.4548972E 02	0.2123123E 02	0.5020039E 02	25.020	2.502	0.050307	10	26.110

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 21 FLT 13.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.444181E 04

ZERO POSITION USED 3.11 LOAD/IN USED -20300.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.6570328E 04							
0.1112781E 04	0.2152882E 03	0.1133416E 04	10.950	10.950	0.431599	1	2.611
-0.2791979E 04	-0.4123037E 03	0.2822258E 04	188.400	94.200	1.000000	2	5.222
0.2728047E 03	-0.1798062E 03	0.3267302E 03	326.611	108.870	0.115769	3	7.833
0.9398479E 03	-0.3481210E 02	0.9404924E 03	357.879	89.470	0.333241	4	10.444
-0.6975368E 02	0.1184043E 02	0.7075146E 02	170.355	34.073	0.025069	5	13.055
-0.6801453E 02	-0.3122097E 01	0.6808511E 02	182.629	30.438	0.024125	6	15.666
0.1429646E 03	-0.2111571E 03	0.2550023E 03	304.100	43.443	0.090354	7	18.277
0.5869801E 02	0.3772853E 02	0.6977750E 02	32.731	4.091	0.024724	8	20.888
0.3564755E 02	0.1138585E 03	0.1240699E 03	73.305	8.145	0.043968	9	23.499
-0.1168410E 02	0.1108741E 03	0.1114881E 03	96.016	9.602	0.039503	10	26.110

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 21 FLT 13.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.253911E 04

ZERO POSITION USED 1.15 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.1000318E 02							
0.4699810E 03	0.2C00090E 03	0.5107695E 03	23.053	23.053	0.332840	1	2.611
-0.1519409E 04	-0.2222108E 03	0.1534582E 04	188.326	94.163	1.000000	2	5.222
0.2025005E 03	-0.1074001E 03	0.2292188E 03	332.060	110.687	0.149369	3	7.833
0.7118862E 03	-0.7907166E 02	0.7162642E 03	353.652	88.415	0.466749	4	10.444
-0.4485010E 02	0.1901230E 02	0.4871344E 02	157.028	31.406	0.031744	5	13.055
0.4221176E 02	-0.7076951E 01	0.4280089E 02	350.483	58.414	0.027891	6	15.666
0.1240349E 03	-0.1707543E 03	0.2110490E 03	305.994	43.713	0.137529	7	18.277
-0.2943980E 02	-0.5604740E 01	0.3002612E 02	191.341	23.918	0.019566	8	20.888
0.7058099E 02	0.5710085E 02	0.9078636E 02	38.973	4.330	0.059160	9	23.499
0.2102435E 02	0.1100652E 03	0.1120551E 03	79.196	7.919	0.073020	10	26.110

Table III. (Continued)

TEST 13 N = 7

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 22 FLT 13.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.228348E 05

ZERO POSITION USED 9.51 LOAD/IN USED -41450.00 (FACTOR THESE NUMBERS BY 0.638)

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1032904E 05							
-0.1810948E 05	0.7184699E 04	0.1948264E 05	158.360	158.360	1.000000	1	2.577
0.9674773E 03	0.3742359E 04	0.3865393E 04	75.505	37.753	0.198402	2	5.155
0.2987170E 03	0.1128610E 04	0.1167472E 04	75.175	25.058	0.059924	3	7.732
0.7394531E 02	0.1014299E 04	0.1016990E 04	85.830	21.458	0.052200	4	10.309
0.9521408E 02	0.3232726E 02	0.1014998E 03	18.572	3.714	0.005210	5	12.887
0.1285391E 04	0.7659377E 03	0.1497151E 04	30.770	5.128	0.076845	6	15.464
-0.1407173E 03	0.3797549E 03	0.4049376E 03	110.332	15.762	0.020787	7	18.041
-0.1938099E 03	0.9136523E 02	0.2142559E 03	154.760	19.345	0.010998	8	20.619
0.1060223E 03	-0.5656520E 02	0.1201584E 03	331.919	36.880	0.006168	9	23.196
0.1704578E 02	-0.2595398E 03	0.2600989E 03	273.758	27.376	0.013350	10	25.773

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 22 FLT 13.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = C.120175E 05

ZERO POSITION USED 3.75 LOAD/IN USED 25900.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.6862270E 04							
-0.9276281E 04	0.4134906E 04	0.1015612E 05	155.975	155.975	1.000000	1	2.577
0.8458545E 03	0.1576607E 04	0.1789178E 04	61.786	30.893	0.176167	2	5.155
0.3587007E 03	0.5624058E 03	0.6670579E 03	57.470	19.157	0.065680	3	7.732
0.1666325E 03	0.5933250E 03	0.6162798E 03	74.313	18.578	0.060681	4	10.309
0.1070715E 03	-0.5910645E 02	0.1458986E 03	317.212	63.442	0.014366	5	12.887
0.1128927E 04	-0.5828384E 02	0.1130430E 04	357.044	59.507	0.111305	6	15.464
0.1992795E 02	0.1903791E 03	0.1914193E 03	84.024	12.003	0.018848	7	18.041
-0.2269747E 03	0.1274832E 03	0.2603257E 03	150.679	18.835	0.025632	8	20.619
-0.3278233E 02	-0.5966986E 02	0.6810840E 02	241.228	26.803	0.006706	9	23.196
-0.9843381E 02	-0.1090022E 03	0.1468696E 03	227.917	22.792	0.014461	10	25.773

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 22 FLT 13.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = C.108504E 05

ZERO POSITION USED 8.27 LOAD/IN USED -30400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.6759570E 04							
-0.8997086E 04	0.2571130E 04	0.9357258E 04	164.051	164.051	1.000000	1	2.577
0.3191980E 03	0.1221215E 04	0.1262241E 04	75.352	37.676	0.134894	2	5.155
0.2831472E 03	0.6C01929E 03	0.6636292E 03	64.744	21.581	0.070921	3	7.732
0.1114514E 03	0.5517144E 03	0.5628589E 03	78.579	19.645	0.060152	4	10.309
0.1077134E 03	-0.1112554E 02	0.1082865E 03	354.103	70.821	0.011572	5	12.887
0.8872246E 03	0.5442715E 03	0.1040864E 04	31.527	5.255	0.111236	6	15.464
-0.1763849E 03	0.2691719E 03	0.3218152E 03	123.236	17.605	0.034392	7	18.041
-0.1187117E 03	0.6192057E 01	0.1188730E 03	177.014	22.127	0.012704	8	20.619
0.9935503E 02	-0.5041450E 01	0.9948282E 02	357.095	39.677	0.010632	9	23.196
-0.1060432E 03	-0.1711529E 03	0.2013417E 03	238.218	23.822	0.021517	10	25.773

Table III. (Continued)

TEST 13 N = 7 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 22 FLT 13.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = C.3162C1E C4

ZERO POSITION USED 0.39 LCAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1710562E 04							
-0.1328699E 04	-0.3295593E 03	0.1371402E 04	194.336	194.336	1.000000	1	2.577
0.5048357E 03	0.1C63527E 04	0.1177263E 04	64.607	32.304	C.858438	2	5.155
-0.4929414E 02	0.2697615E 03	0.2762283E 03	100.355	33.452	C.199562	3	7.732
-0.2010436E 03	0.E4268+1E 03	0.3663342E 03	103.419	25.855	0.631714	4	10.309
0.2317623E 02	0.1124917E 03	0.1148344E 03	78.358	15.672	0.083750	5	12.887
-0.6675984E 03	0.2143445E 03	0.7011641E 03	162.200	27.033	0.511275	6	15.464
-0.1931857E 01	-0.1137728E 03	0.1137392E 03	269.027	38.432	C.082973	7	18.041
0.1119227E 03	-0.6593462E 02	0.1299002E 03	329.497	41.187	0.094721	8	20.619
0.4247101E 02	-0.1117653E 02	0.4391593E 02	345.256	38.362	0.032023	9	23.196
0.7204785E 02	0.3595786E 00	0.7204874E 02	0.286	0.029	0.052537	10	25.773

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 22 FLT 13.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = C.9513E7E C4

ZERO POSITION USED 3.11 LCAD/IN USED -20300.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.6206699E 04							
0.1351003E 04	-0.2170337E 03	0.1368325E 04	350.874	350.874	0.187533	1	2.577
-0.7126039E 04	0.1567676E 04	0.7296441E 04	167.593	83.796	1.000000	2	5.155
0.4384028E 03	-0.3620674E 03	0.5685857E 03	320.447	106.816	0.077926	3	7.732
0.2702425E 04	-0.1403790E 04	0.3045280E 04	332.550	83.138	0.417365	4	10.309
-0.5236870E 02	0.1C68743E 03	0.1190152E 03	116.105	23.221	C.016311	5	12.887
-0.6645098E 02	0.4925728E 02	0.8272446E 02	143.456	23.909	C.011338	6	15.464
0.3841577E 02	-0.1886516E 03	0.1925232E 03	281.510	40.216	0.026386	7	18.041
0.8424310E 02	0.9847325E 02	0.1295912E 03	49.453	6.182	0.017761	8	20.619
-0.1814157E 02	0.1362096E 03	0.1374124E 03	97.587	10.843	0.018833	9	23.196
0.4357306E 02	-0.1C89462E 03	0.1173366E 03	291.799	29.180	0.016081	10	25.773

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 22 FLT 13.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = C.5505586 C4

ZERO POSITION USED 1.15 LCAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2558645E 03							
0.7022883E 03	0.7C648?3E 02	0.7058330E 03	5.745	5.745	0.172872	1	2.577
-0.3946170E 04	0.1048076E C4	0.4082979E 04	165.126	82.563	1.000000	2	5.155
0.2497718E 03	-0.2728711E 03	0.3699250E 03	312.469	104.156	0.090602	3	7.732
0.1966137E 04	-0.1181909E 04	0.2294036E 04	328.939	82.247	C.561853	4	10.309
-0.3845155E 02	0.2158966E 02	0.4409802E 02	150.687	30.137	0.010800	5	12.887
0.1004323E 03	-0.4329591E 02	0.1093672E 03	336.679	56.113	0.026786	6	15.464
0.1757054E 03	-0.1772539E 03	0.2495830E 03	314.749	44.964	0.061128	7	18.041
0.2913655E 02	0.3944615E 02	0.4904016E 02	53.549	6.694	0.012011	8	20.619
0.3780136E 02	0.1785516E 03	0.1829005E 03	78.072	8.675	0.044796	9	23.196
0.5674953E 02	-0.4449875E 02	0.7211549E 02	321.899	32.190	0.017662	10	25.773

Table III. (Continued)

TEST 13 N = 8

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 23 FLT 13.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.340515E 04

ZERO POSITION USED 9.51 LOAD/IN USED -41450.00 (FACTOR THESE NUMBERS BY 0.638)

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1486583E 05							
0.5029312E 03	0.1703114E 04	0.1775819E 04	73.548	73.548	1.000000	1	2.591
0.1926406E 03	0.1476757E 03	0.2427314E 03	37.473	18.737	0.136687	2	5.181
0.7843643E 03	0.3672144E 03	0.8792258E 03	26.858	8.953	0.495110	3	7.772
-0.6778352E 02	-0.2576233E 03	0.3639902E 03	259.267	64.817	0.204970	4	10.363
0.1467607E 03	-0.2846382E 03	0.3202461E 03	297.276	59.455	0.180337	5	12.953
0.6705979E 03	-0.1230130E 03	0.6836521E 03	348.761	58.130	0.384984	6	15.544
-0.3157763E 03	0.6715803E 03	0.7421165E 03	115.183	16.455	0.417901	7	18.135
-0.1981480E 03	0.1124971E 03	0.2278557E 03	150.415	18.802	0.128310	8	20.725
-0.3566534E 02	-0.1403199E 03	0.1448309E 03	255.682	28.407	0.081557	9	23.316
-0.1298991E 02	-0.1755259E 03	0.1760059E 03	265.767	26.577	0.099113	10	25.907

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 23 FLT 13.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.305462E 04

ZERO POSITION USED 3.75 LOAD/IN USED 25900.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.9962395E 04							
0.1592598E 04	-0.9274277E 03	0.1842957E 04	329.786	329.786	1.000000	1	2.591
-0.1010375E 04	-0.2053131E 03	0.1031024E 04	191.486	95.743	0.559440	2	5.181
0.4892586E 03	0.4288734E 02	0.4901785E 03	5.019	1.673	0.265974	3	7.772
-0.1510089E 03	-0.3096826E 03	0.3445388E 03	244.005	61.001	0.186949	4	10.363
-0.6996310E 02	-0.1711153E 03	0.1848656E 03	247.762	49.552	0.100309	5	12.953
0.4300523E 03	-0.4485457E 03	0.6210549E 03	311.732	51.955	0.336136	6	15.544
0.2294471E 03	0.5717266E 03	0.6160496E 03	68.133	9.733	0.334272	7	18.135
-0.3418803E 02	0.2628525E 03	0.2650664E 03	97.411	12.176	0.143827	8	20.725
0.1473229E 02	0.4795138E 01	0.1549397E 02	18.028	2.003	0.008407	9	23.316
-0.1285820E 03	-0.9619183E 02	0.1605808E 03	216.800	21.680	0.087132	10	25.907

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 23 FLT 13.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.311361E 04

ZERO POSITION USED 6.27 LOAD/IN USED -30400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.9566367E 04							
0.2161107E 04	-0.1079762E 04	0.2415337E 04	333.452	333.452	1.000000	1	2.591
-0.5462830E 03	-0.7434016E 03	0.9225352E 03	233.690	116.845	0.381870	2	5.181
0.4497661E 03	0.1719182E 03	0.4815032E 03	20.919	6.973	0.199311	3	7.772
0.1037133E 03	-0.2540999E 03	0.3118511E 03	289.425	72.356	0.129086	4	10.363
-0.1548535E 02	-0.3759064E 02	0.4065527E 02	247.611	49.522	0.016829	5	12.953
0.6025117E 03	-0.4899424E 02	0.6044922E 03	355.360	59.227	0.250221	6	15.544
-0.4130501E 02	0.2078268E 03	0.2119917E 03	101.241	14.463	0.087709	7	18.135
0.4350699E 02	0.2574363E 03	0.2611035E 03	80.386	10.048	0.108080	8	20.725
-0.1796708E 03	-0.1338989E 02	0.1801689E 03	184.262	20.474	0.074578	9	23.316
-0.8080051E 02	-0.2364036E 03	0.2498307E 03	251.130	25.113	0.103414	10	25.907

Table III. (Continued)

TEST 13 M = 8 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 23 FLT 13.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.254718E C4

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2187516E 04							
0.1031160E 04	-0.1323777E 04	0.1677998E 04	307.917	307.917	1.000000	1	2.591
-0.1308650E 03	0.4401704E 03	0.4592119E 03	106.558	53.279	0.273667	2	5.181
0.2651213E 03	0.6917555E 02	0.2797170E 03	18.591	6.197	0.166697	3	7.772
-0.4706633E 03	-0.4457388E 03	0.6482335E 03	223.442	55.861	0.386314	4	10.363
-0.5598196E 02	0.1772920E 03	0.1859109E 03	107.525	21.505	0.110793	5	12.953
-0.1661054E 03	0.2879028E 03	0.3323857E 03	119.983	19.997	0.198085	6	15.544
-0.1829081E 03	-0.3999172E 03	0.4397603E 03	245.422	35.060	0.262074	7	18.135
-0.1257229E 02	-0.1031722E 03	0.1039354E 03	263.052	32.882	0.061940	8	20.725
0.1062324E 03	-0.2657014E 02	0.1095048E 03	345.958	38.440	0.065259	9	23.316
0.6974170E 02	-0.3191185E 02	0.7669592E 02	335.412	33.541	0.045707	10	25.907

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 23 FLT 13.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = C.702459E C4

ZERO POSITION USED 3.11 LOAD/IN USED -20300.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.6990094E 04							
0.6351433E 03	0.3414783E 03	0.7211201E 03	28.254	28.254	0.138844	1	2.591
0.4329055E 04	-0.2869561E 04	0.5193754E 04	326.461	163.231	1.000000	2	5.181
0.6384324E 03	-0.3180374E 03	0.7583447E 03	335.204	111.735	0.146011	3	7.772
-0.1580792E 04	0.1637942E 04	0.2276347E 04	133.983	33.496	0.438285	4	10.363
0.1776472E 03	-0.6966696E 02	0.1902924E 03	338.531	67.706	0.036754	5	12.953
-0.9784570E 02	0.1946050E 03	0.2178145E 03	116.693	19.449	0.041939	6	15.544
-0.3325172E 02	-0.1709159E 03	0.1741204E 03	258.990	36.999	0.033525	7	18.135
-0.1337745E 03	0.9595073E 02	0.1413354E 03	137.243	17.155	0.027213	8	20.725
-0.4457399E 02	-0.7248253E 02	0.8509145E 02	238.410	26.490	0.016383	9	23.316
-0.1514171E 02	-0.2076117E 02	0.2569626E 02	233.896	23.390	0.004948	10	25.907

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 23 FLT 13.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.472625E C4

ZERO POSITION USED 1.15 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.2525759E 03							
0.2873577E 03	0.4499792E 03	0.5339060E 03	57.438	57.438	0.169523	1	2.591
0.2508281E 04	-0.1904642E 04	0.3149466E 04	322.769	161.395	1.000000	2	5.181
0.4218076E 03	-0.2742942E 03	0.5031489E 03	326.965	108.988	0.159757	3	7.772
-0.8551318E 03	0.1350794E 04	0.1598716E 04	122.336	30.584	0.507615	4	10.363
0.1668933E 03	-0.1029301E 03	0.1960815E 03	328.336	65.667	0.062259	5	12.953
0.4442342E 01	0.6359239E 02	0.6374736E 02	86.004	14.334	0.020241	6	15.544
0.3477843E 02	-0.2355450E 03	0.2380987E 03	278.399	39.771	0.075600	7	18.135
-0.3269690E 02	0.1356874E 03	0.1379192E 03	103.714	12.964	0.043791	8	20.725
-0.4710669E 02	-0.6799934E 02	0.8272212E 02	235.288	26.143	0.026265	9	23.316
0.1334283E 02	0.1434115E 03	0.1440308E 03	84.684	8.468	0.045732	10	25.907

Table III. (Continued)

TEST 13 N = 9

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 24 FLT 13.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.126C74E C5

ZERO POSITION USED 9.51 LCAD/IN USED -41450.00 (FACTOR THESE NUMBERS BY 0.638)

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.2408651E 06							
0.8558516E 04	-0.2342805E 04	0.8873383E 04	344.691	344.691	1.000000	1	2.481
-0.2622479E 04	-0.3217561E 04	0.4150992E 04	230.819	115.410	0.467803	2	4.963
0.1011344E 04	-0.4257237E 02	0.1012239E 04	357.539	119.196	0.114076	3	7.444
-0.1896319E 03	-0.7352256E 03	0.7573505E 03	255.479	63.875	0.085351	4	9.926
-0.3735398E 03	-0.1443976E 03	0.4004780E 03	201.135	40.227	0.045133	5	12.407
0.4720381E 03	-0.6519617E 03	0.8049063E 03	305.906	50.984	0.090710	6	14.888
0.4721875E 03	0.1181660E 04	0.1272509E 04	68.218	9.745	0.143407	7	17.370
-0.1213003E 03	-0.2805554E 02	0.1245025E 03	193.023	24.128	0.014031	8	19.851
-0.1887188E 03	-0.1524444E 03	0.2425986E 03	218.931	24.326	0.027340	9	22.333
-0.1628472E 03	-0.1383212E 03	0.2136632E 03	220.344	22.034	0.024079	10	24.814

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 24 FLT 13.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = C.988734E 04

ZERO POSITION USED 3.75 LCAD/IN USED 25900.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1111866E 05							
0.6185465E 04	-0.3524601E 04	0.7119184E 04	330.324	330.324	1.000000	1	2.481
-0.2730993E 04	-0.1988493E 04	0.3378228E 04	216.059	108.030	0.474525	2	4.963
0.6519604E 03	-0.2926465E 03	0.7146289E 03	335.826	111.942	0.100381	3	7.444
-0.3299312E 03	-0.4457029E 03	0.5545317E 03	233.489	58.372	0.077893	4	9.926
-0.2279325E 03	-0.3502838E 02	0.2306083E 03	188.737	37.747	0.032393	5	12.407
0.1475769E 03	-0.6194063E 03	0.6367441E 03	283.401	47.234	0.089441	6	14.888
0.7269290E 03	0.4713008E 03	0.8663430E 03	32.957	4.708	0.121691	7	17.370
-0.1755859E 03	0.1131840E 03	0.2089044E 03	147.194	18.399	0.029344	8	19.851
-0.1264149E 03	-0.2436989E 02	0.1287425E 03	190.911	21.212	0.018084	9	22.333
-0.1150561E 03	-0.1744020E 02	0.1163704E 03	188.619	18.862	0.016346	10	24.814

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 24 FLT 13.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = C.104258E C5

ZERO POSITION USED 8.27 LCAD/IN USED -30400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1044246E 05							
0.7153582E 04	-0.3571496E 04	0.8182082E 04	330.962	330.962	1.000000	1	2.481
-0.2263642E 04	-0.2857835E 04	0.3645723E 04	231.618	115.809	0.445574	2	4.963
0.7092150E 03	-0.1128714E 03	0.7181445E 03	350.957	116.986	0.087770	3	7.444
-0.1891645E 03	-0.4C01243E 03	0.4425862E 03	244.697	61.174	0.054092	4	9.926
-0.1096585E 03	-0.1758484E 03	0.2072593E 03	238.043	47.609	0.025331	5	12.407
0.3072996E 03	-0.3670115E 03	0.4786755E 03	309.939	51.657	0.058503	6	14.888
0.2754143E 03	0.5306440E 03	0.5980371E 03	62.579	8.940	0.073091	7	17.370
-0.1089648E 03	0.1963154E 03	0.2245286E 03	119.032	14.879	0.027441	8	19.851
-0.1696111E 03	0.3396741E 02	0.1729789E 03	168.675	18.742	0.021141	9	22.333
-0.2200102E 03	0.1295616E 02	0.2203913E 03	176.630	17.663	0.026936	10	24.814

Table III. (Continued)

TEST 13 M = 3 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 24 FLT 13.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.368902E 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2343158E 04							
0.1994776E 04	-0.1834594E 04	0.2710141E 04	317.395	317.395	1.000000	1	2.481
-0.8156023E 03	-0.2302055E 03	0.8474673E 03	195.762	97.881	0.312702	2	4.963
0.3565278E 03	0.3591989E 02	0.3582837E 03	5.597	1.866	0.135891	3	7.444
-0.6612673E 03	-0.5201045E 03	0.8412983E 03	218.136	54.546	0.310426	4	9.926
-0.8939887E 00	0.1817765E 03	0.1817787E 03	90.282	18.056	0.067073	5	12.407
-0.4701523E 02	0.3943206E 03	0.3971135E 03	96.799	16.133	0.146529	6	14.888
-0.4057627E 03	-0.1644779E 03	0.4378313E 03	202.065	28.866	0.161553	7	17.370
0.4026195E 02	-0.1189630E 03	0.1255915E 03	288.698	36.087	0.046341	8	19.851
-0.4168423E 01	-0.5201392E 02	0.5218068E 02	265.418	29.491	0.019254	9	22.333
0.5175175E 02	-0.5394864E 02	0.7475760E 02	313.809	31.381	0.027584	10	24.814

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 24 FLT 13.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.110573E 05

ZERO POSITION USED 3.11 LOAD/IN USED -20300.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.6721316E 04							
0.6097388E 03	0.5529678E 03	0.8231370E 03	42.205	42.205	0.109161	1	2.481
0.5902750E 04	-0.4692355E 04	0.7540598E 04	321.517	160.759	1.000000	2	4.963
0.1341189E 04	-0.6653896E 03	0.1497174E 04	333.613	111.204	0.198548	3	7.444
-0.2372835E 04	0.3154906E 04	0.3947612E 04	126.947	31.737	0.523514	4	9.926
0.4682856E 03	-0.3095708E 03	0.5613511E 03	326.532	65.306	0.074445	5	12.407
-0.6487196E 01	0.6451964E 02	0.6484492E 02	95.742	15.957	0.008599	6	14.888
-0.1850442E 03	-0.1622102E 03	0.2460762E 03	221.238	31.605	0.032634	7	17.370
0.7857559E 02	-0.1588628E 02	0.8055751E 02	348.626	43.578	0.010683	8	19.851
0.1138544E 03	0.6944714E 02	0.1333631E 03	31.382	3.487	0.017686	9	22.333
0.4918880E 02	-0.5000183E 02	0.7014070E 02	314.530	31.453	0.009302	10	24.814

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 24 FLT 13.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.683759E 04

ZERO POSITION USED 1.15 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.1082848E 03							
0.1244687E 03	0.6889407E 03	0.7000994E 03	79.757	79.757	0.158412	1	2.481
0.3191106E 04	-0.3057547E 04	0.4419473E 04	316.224	158.112	1.000000	2	4.963
0.8070522E 03	-0.4669639E 03	0.9477903E 03	328.376	109.459	0.214458	3	7.444
-0.1281501E 04	0.2555597E 04	0.2862478E 04	116.596	29.149	0.647697	4	9.926
0.2131407E 03	-0.2045070E 03	0.2953845E 03	316.184	63.237	0.066837	5	12.407
-0.2673337E 02	-0.1835548E 02	0.3242833E 02	214.474	35.746	0.007338	6	14.888
-0.4584599E 02	-0.3156958E 03	0.3190078E 03	261.736	37.391	0.072182	7	17.370
0.7220729E 02	0.5312508E 02	0.8964465E 02	36.343	4.543	0.020284	8	19.851
0.3105785E 02	-0.1407028E 02	0.3409637E 02	335.628	37.292	0.007715	9	22.333
0.1478500E 02	-0.8953743E 02	0.9074989E 02	279.376	27.938	0.020534	10	24.814

Table III. (Continued)

TEST 13 N = 10

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 25 FLT 13.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.681830E 04

ZERO POSITION USED 9.51 LOAD/IN USED -41450.00 (FACTOR THESE NUMBERS BY 0.638)

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1374049E 05							
-0.4248273E 04	0.3198835E 04	0.5317930E 04	143.021	143.021	1.000000	1	2.584
0.5916665E 03	0.9683496E 03	0.1134800E 04	58.575	29.287	0.213391	2	5.168
0.7765830E 03	0.6869443E 03	0.1036809E 04	41.435	13.812	0.194965	3	7.752
0.4145105E 02	-0.5777972E 02	0.7111037E 02	305.556	76.414	0.013372	4	10.336
-0.1133682E 03	-0.1312586E 03	0.1734352E 03	229.193	45.837	0.032614	5	12.920
0.9377100E 03	-0.5255728E 02	0.9391814E 03	356.792	59.465	0.176607	6	15.504
-0.3308523E 03	0.5766384E 03	0.6647857E 03	119.647	17.121	0.125008	7	18.088
0.1576947E 03	0.6329263E 02	0.1699222E 03	21.869	2.734	0.031953	8	20.672
-0.2821180E 00	-0.1869017E 03	0.1869019E 03	269.914	29.990	0.035122	9	23.256
-0.6273480E 02	-0.1475110E 03	0.1602970E 03	246.960	24.696	0.030143	10	25.840

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 25 FLT 13.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.273310E 04

ZERO POSITION USED 3.75 LOAD/IN USED 25900.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.8843539E 04							
-0.8058526E 03	0.7301682E 03	0.1087478E 04	137.822	137.822	1.000000	1	2.584
-0.4914880E 03	-0.3214307E 03	0.5872632E 03	213.184	106.592	0.540023	2	5.168
0.3503643E 03	0.1430280E 03	0.3784336E 03	22.207	7.402	0.347992	3	7.752
-0.5861154E 02	-0.2062403E 03	0.2144071E 03	254.135	63.534	0.197160	4	10.336
-0.1107139E 03	-0.1434164E 03	0.1811790E 03	232.333	46.467	0.166605	5	12.920
0.5361309E 03	-0.4985989E 03	0.7321455E 03	317.077	52.846	0.673251	6	15.504
0.6758755E 02	0.5809646E 03	0.5843831E 03	83.364	11.909	0.537834	7	18.088
0.6370984E 02	0.3755066E 02	0.7395264E 02	30.515	3.814	0.068004	8	20.672
-0.4459450E 02	-0.2409146E 02	0.5068597E 02	208.379	23.153	0.046609	9	23.256
-0.1934966E 03	-0.1900671E 02	0.1944279E 03	185.610	18.561	0.178788	10	25.840

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 25 FLT 13.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.217009E 04

ZERO POSITION USED 8.27 LOAD/IN USED -30400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.8927066E 04							
-0.2750572E 03	-0.2160164E 03	0.3497734E 03	218.140	218.140	0.473379	1	2.584
-0.5385313E 03	-0.5059016E 03	0.7389860E 03	223.211	111.605	1.000000	2	5.168
0.4919548E 03	0.1888262E 03	0.5269485E 03	20.998	6.999	0.713166	3	7.752
0.1036154E 03	-0.5478026E 02	0.1172051E 03	332.135	83.034	0.158624	4	10.336
-0.1165055E 03	-0.1128100E 03	0.1621715E 03	224.377	44.815	0.219481	5	12.920
0.6376342E 03	-0.9840065E 02	0.6451870E 03	351.227	58.538	0.873189	6	15.504
0.4648438E 01	0.3044541E 03	0.3044895E 03	89.125	12.732	0.412093	7	18.088
-0.2923295E 02	0.1257922E 03	0.1259216E 03	102.650	12.831	0.174481	8	20.672
-0.9513628E 02	-0.8405125E 02	0.1269734E 03	221.474	24.608	0.171844	9	23.256
-0.6147569E 01	-0.4872720E 02	0.4911346E 02	262.909	26.281	0.066470	10	25.840

Table III. (Continued)

TEST 13 N = 10 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 25 FLT 13.0 TR 41 2 FLAP BEND STA 116
OVERALL CYCLIC LOAD = 0.195430E 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2103239E 04							
0.4239653E 03	-0.9723767E 03	0.1060784E 04	293.558	293.558	1.000000	1	2.584
-0.8995079E 02	0.4112209E 03	0.4209438E 03	102.339	51.169	0.396823	2	5.168
0.1706930E 03	0.1731262E 03	0.2431233E 03	45.405	15.135	0.229192	3	7.752
-0.3341099E 03	-0.1634953E 03	0.3717457E 03	203.057	50.764	0.393537	4	10.336
-0.4903640E 01	0.1217563E 03	0.1219552E 03	92.309	18.462	0.114873	5	12.920
-0.2900728E 03	0.2553203E 03	0.4139519E 03	134.436	22.414	0.390232	6	15.504
-0.1006454E 03	-0.2601846E 03	0.2789722E 03	248.852	35.550	0.262987	7	18.088
0.1433561E 02	-0.6216250E 02	0.6381357E 02	282.962	35.373	0.060157	8	20.672
0.1467955E 02	-0.2141315E 02	0.2596195E 02	304.433	33.826	0.024474	9	23.256
0.2865262E 02	-0.4168406E 02	0.5058197E 02	304.504	30.450	0.047684	10	25.840

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 25 FLT 13.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.381177E 04

ZERO POSITION USED 3.11 LOAD/IN USED -20300.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.6678129E 04							
0.7584287E 03	-0.2464983E 02	0.7683243E 03	358.163	358.163	0.354776	1	2.584
0.1579297E 04	-0.1484982E 04	0.2167070E 04	316.745	158.372	1.000000	2	5.168
0.5043669E 03	-0.5516165E 03	0.7474402E 03	312.438	104.146	0.344908	3	7.752
-0.6988577E 03	0.1013526E 04	0.1231112E 04	124.588	31.147	0.568100	4	10.336
0.1503130E 02	-0.1105152E 02	0.1863263E 02	323.621	64.724	0.008598	5	12.920
-0.1015962E 03	0.3034102E 03	0.3199678E 03	108.513	18.086	0.147650	6	15.504
-0.2329309E 03	-0.1305399E 03	0.2670159E 03	209.267	29.895	0.123215	7	18.088
-0.3982346E 02	-0.7190440E 02	0.8171597E 02	241.634	30.204	0.037708	8	20.672
-0.2909971E 03	0.1253969E 03	0.3168652E 03	156.698	17.410	0.146218	9	23.256
0.8608278E 02	0.9005261E 02	0.1245781E 03	46.291	4.629	0.057487	10	25.840

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 25 FLT 13.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.236313E 04

ZERO POSITION USED 1.15 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.1893190E 03							
0.3522715E 03	0.3738777E 03	0.5136921E 03	46.704	46.704	0.361295	1	2.584
0.8509231E 03	-0.1139063E 04	0.1421807E 04	306.761	153.380	1.000000	2	5.168
0.2552840E 03	-0.4251624E 03	0.4959163E 03	300.932	100.327	0.348793	3	7.752
-0.3372529E 03	0.7178059E 03	0.7933657E 03	115.166	28.791	0.557801	4	10.336
-0.1293766E 03	0.5829274E 02	0.1419026E 03	155.745	31.149	0.099804	5	12.920
-0.1151169E 03	0.1305773E 03	0.1740756E 03	131.399	21.900	0.122433	6	15.504
0.1134610E 03	-0.1711441E 02	0.1147445E 03	351.422	50.203	0.080703	7	18.088
0.7768109E 02	0.9713965E 02	0.1243803E 03	51.351	6.419	0.087480	8	20.672
0.6599733E 02	0.1046532E 03	0.1237252E 03	57.763	6.418	0.087020	9	23.256
0.3677483E 02	0.9538048E 02	0.1059653E 03	69.693	6.969	0.074529	10	25.840

Table III. (Continued)

TEST 13 N = 11

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 010 26 13.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.913391E 04

ZERO POSITION USED 9.51 LOAD/IN USED -41450.00 (FACTOR THESE NUMBERS BY 0.038)

	AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
MEAN	-0.1687371E 05							
	-0.2902757E 04	-0.6932715E 04	0.7515883E 04	247.281	247.281	1.000000	1	2.551
	-0.2310519E 04	0.5609656E 03	0.2377642E 04	166.353	83.177	0.316349	2	5.102
	0.6483679E 03	0.2733472E 03	0.7036331E 03	22.860	7.620	0.093619	3	7.653
	-0.5088250E 03	0.1456673E 02	0.5090334E 03	178.360	44.590	0.067728	4	10.204
	-0.2159668E 03	-0.1647928E 03	0.2716584E 03	217.345	43.469	0.036145	5	12.755
	0.8541602E 03	-0.5591919E 03	0.1020924E 04	326.788	54.465	0.135835	6	15.306
	0.3494965E 02	0.1099618E 04	0.1100173E 04	88.179	12.597	0.146380	7	17.857
	-0.2244596E 03	-0.5115668E 02	0.2302154E 03	192.839	24.105	0.030631	8	20.408
	0.8588020E 02	-0.2299834E 03	0.2454949E 03	290.477	32.275	0.032663	9	22.959
	-0.7160893E 02	-0.1388148E 03	0.1561966E 03	242.713	24.271	0.020782	10	25.510

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 26 FLT 13.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.695329E 04

ZERO POSITION USED 3.75 LOAD/IN USED 25900.00

	AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
	-0.1131391E 05							
	-0.8894980E 03	-0.5620746E 04	0.5690691E 04	261.007	261.007	1.000000	1	2.551
	-0.2133607E 04	0.2023892E 03	0.2143185E 04	174.581	87.291	0.376612	2	5.102
	0.3053784E 03	0.1376962E 03	0.3349868E 03	24.271	8.090	0.058866	3	7.653
	-0.3886919E 03	0.7571289E 01	0.3887656E 03	178.884	44.721	0.068316	4	10.204
	-0.1227333E 03	-0.1167949E 03	0.1694241E 03	223.580	44.716	0.029772	5	12.755
	0.5708306E 03	-0.4239958E 03	0.7110696E 03	323.396	53.899	0.124953	6	15.306
	0.1174128E 03	0.7521016E 03	0.7612112E 03	81.127	11.590	0.133764	7	17.857
	-0.7546495E 02	0.9625336E 02	0.1223097E 03	128.097	16.012	0.021493	8	20.408
	-0.9831238E 02	-0.9653646E 01	0.9878519E 02	185.608	20.623	0.017359	9	22.959
	-0.1319641E 03	-0.4343869E 02	0.1389296E 03	198.220	19.822	0.024413	10	25.510

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 26 FLT 13.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.745377E 04

ZERO POSITION USED 8.27 LOAD/IN USED -30400.00

	AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
	0.2552482E 05							
	0.1110406E 03	-0.6569074E 04	0.6570012E 04	270.968	270.968	1.000000	1	2.551
	-0.2039646E 04	-0.3726880E 03	0.2073415E 04	190.355	95.177	0.315588	2	5.102
	0.4726606E 03	-0.8323415E 02	0.4799333E 03	350.013	116.671	0.073049	3	7.653
	-0.3731829E 03	-0.2111772E 03	0.4287903E 03	209.505	52.376	0.065265	4	10.204
	-0.2196668E 03	0.4365320E 02	0.2239622E 03	168.760	33.752	0.034089	5	12.755
	0.6372141E 03	-0.4378774E 03	0.7731614E 03	325.504	54.251	0.117680	6	15.306
	0.1709933E 03	0.7465640E 03	0.7658066E 03	77.129	11.018	0.116561	7	17.857
	-0.1037522E 03	0.6131358E 02	0.1205150E 03	149.419	18.677	0.018343	8	20.408
	0.2196451E 02	0.2468381E 02	0.3304134E 02	48.336	5.371	0.005029	9	22.959
	-0.2653796E 02	-0.8976964E 02	0.9361008E 02	253.531	25.353	0.014248	10	25.510

Table III. (Continued)

TEST 13 N = 11 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 26 FLT 13.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.355726E 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2350426E 04							
0.5118501E 03	-0.2263543E 04	0.2320693E 04	282.742	282.742	1.000000	1	2.551
-0.6566067E 03	0.6839902E 03	0.9481428E 03	133.830	66.915	0.408560	2	5.102
0.1979972E 03	0.5137259E 02	0.2043532E 03	14.545	4.848	0.088143	3	7.653
-0.8446569E 03	-0.1817993E 03	0.8641956E 03	192.144	48.036	0.372387	4	10.204
0.7807883E 02	0.1982186E 03	0.2130421E 03	68.500	13.700	0.091801	5	12.755
-0.3772661E 03	0.2954822E 03	0.4792070E 03	141.931	23.655	0.206493	6	15.306
-0.1641864E 03	-0.4072375E 03	0.4390894E 03	248.042	35.435	0.189206	7	17.857
0.4909489E 02	-0.6885014E 02	0.8456151E 02	305.491	38.186	0.036438	8	20.408
0.3968045E 02	0.4892570E 01	0.3998094E 02	7.029	0.781	0.017228	9	22.959
0.7416183E 02	0.3016690E 02	0.8006258E 02	22.135	2.214	0.034499	10	25.510

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 26 FLT 13.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.837958E 04

ZERO POSITION USED 3.11 LOAD/IN USED -20300.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.6916875E 04							
0.7554719E 03	0.4822871E 03	0.8962915E 03	32.554	32.554	0.156096	1	2.551
0.5590417E 03	-0.5714641E 04	0.5741918E 04	275.587	137.794	1.000000	2	5.102
-0.5008413E 03	-0.3078059E 03	0.5878660E 03	211.574	70.525	0.102381	3	7.653
-0.4235234E 03	0.2376729E 04	0.2414169E 04	100.104	25.026	0.420446	4	10.204
-0.5626051E 02	-0.1997803E 03	0.2075509E 03	254.272	50.854	0.036147	5	12.755
-0.1694450E 03	0.1340936E 03	0.2160849E 03	141.643	23.607	0.037633	6	15.306
0.6768109E 02	-0.4252202E 03	0.4305728E 03	279.044	39.863	0.074988	7	17.857
0.5835503E 02	0.2178938E 02	0.6229034E 02	20.475	2.559	0.010848	8	20.408
0.9489583E 01	-0.4091905E 01	0.1033421E 02	336.674	37.408	0.001800	9	22.959
0.6705295E 02	-0.4898871E 01	0.6723164E 02	355.821	35.582	0.011709	10	25.510

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 26 FLT 13.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.517877E 04

ZERO POSITION USED 1.15 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.1913438E 03							
0.2952595E 03	0.5001943E 03	0.5808376E 03	59.447	59.447	0.171854	1	2.551
0.2544155E 03	-0.3370252E 04	0.3379841E 04	274.317	137.158	1.000000	2	5.102
-0.3311450E 03	-0.9136256E 02	0.3435171E 03	195.424	65.141	0.101637	3	7.653
-0.1143766E 03	0.1853231E 04	0.1856757E 04	93.532	23.383	0.549362	4	10.204
-0.7823610E 02	-0.1951723E 03	0.2102691E 03	248.156	49.631	0.062213	5	12.755
-0.1151394E 02	0.9404643E 02	0.9474863E 02	96.980	16.163	0.028033	6	15.306
0.1461174E 03	-0.2489957E 03	0.2887024E 03	300.406	42.915	0.085419	7	17.857
-0.3792210E 02	0.6443765E 02	0.7476830E 02	120.477	15.060	0.022122	8	20.408
0.7134358E 01	-0.1010730E 03	0.1013245E 03	274.038	30.449	0.029979	9	22.959
0.1622889E 03	-0.3424241E 01	0.1623251E 03	358.791	35.879	0.048027	10	25.510

Table III. (Continued)

TEST 13 N = 12

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 27 FLT 13.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.162738E 05

ZERO POSITION USED 9.51 LOAD/IN USED -41450.00 (FACTOR THESE NUMBERS BY 0.638)

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2003898E 05							
-0.1618204E 04	-0.1408060E 05	0.1417328E 05	263.444	263.444	1.000000	1	2.500
-0.4401359E 04	0.2207528E 03	0.4406891E 04	177.129	88.564	0.310925	2	5.000
0.6626221E 03	-0.1839585E 03	0.6876836E 03	344.484	114.828	0.048520	3	7.500
-0.7186555E 03	0.2286012E 02	0.7190190E 03	178.178	44.545	0.050731	4	10.000
-0.4272297E 03	-0.1642687E 03	0.4577219E 03	201.032	40.206	0.032295	5	12.500
0.9064011E 03	-0.9494512E 03	0.1312639E 04	313.671	52.279	0.092614	6	15.000
0.5915676E 03	0.1301094E 04	0.1429265E 04	65.550	9.364	0.100842	7	17.500
-0.2665513E 03	0.2576030E 02	0.2677930E 03	174.480	21.810	0.018894	8	20.000
-0.1610725E 03	-0.6059309E 02	0.1720926E 03	200.616	22.291	0.012142	9	22.500
-0.1251901E 03	-0.9041135E 02	0.1544240E 03	215.837	21.584	0.010895	10	25.000

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 27 FLT 13.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.114950E 05

ZERO POSITION USED 3.75 LOAD/IN USED 25900.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1277971E 05							
-0.4707007E 03	-0.1019485E 05	0.1020571E 05	267.356	267.356	1.000000	1	2.500
-0.3640861E 04	0.3895598E 03	0.3661642E 04	173.893	86.946	0.358784	2	5.000
0.1025322E 03	-0.9662012E 02	0.1408840E 03	316.700	105.567	0.013804	3	7.500
-0.5895364E 03	0.2997253E 03	0.6613535E 03	153.051	38.263	0.064802	4	10.000
-0.3159473E 03	-0.5285069E 02	0.3203369E 03	189.496	37.899	0.031388	5	12.500
0.2724871E 03	-0.4276477E 03	0.5070815E 03	302.504	50.417	0.049686	6	15.000
0.7704519E 03	0.5783652E 03	0.9633806E 03	36.895	5.271	0.094396	7	17.500
-0.2306184E 02	0.1155601E 03	0.1178388E 03	101.286	12.661	0.011546	8	20.000
0.1267795E 01	-0.2384288E 02	0.2387656E 02	273.044	30.338	0.002340	9	22.500
-0.1117267E 03	-0.2361230E 02	0.1141945E 03	191.933	19.193	0.011189	10	25.000

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 27 FLT 13.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.125487E 05

ZERO POSITION USED 8.27 LOAD/IN USED -30400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1274713E 05							
0.1074511E 04	-0.1153821E 05	0.1158814E 05	275.320	275.320	1.000000	1	2.500
-0.3825208E 04	-0.5238113E 03	0.3860906E 04	187.797	93.899	0.333177	2	5.000
0.4753115E 03	-0.2586924E 03	0.5411494E 03	331.442	110.481	0.046699	3	7.500
-0.4746960E 03	-0.1766714E 03	0.5065068E 03	200.414	50.104	0.043709	4	10.000
-0.2089193E 03	-0.1862010E 03	0.2798538E 03	221.709	44.342	0.024150	5	12.500
0.3720654E 03	-0.6596926E 03	0.7573816E 03	299.423	49.904	0.065358	6	15.000
0.2867053E 03	0.7290127E 03	0.7833643E 03	68.531	9.790	0.067600	7	17.500
-0.1096521E 03	0.1236648E 03	0.1652773E 03	131.563	16.445	0.014263	8	20.000
-0.9619812E 02	-0.3361208E 02	0.1019012E 03	199.260	22.140	0.008794	9	22.500
-0.8886057E 02	-0.1473654E 03	0.1720836E 03	238.910	23.891	0.014850	10	25.000

Table III. (Continued)

TEST 13 N = 12 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 27 FLT 13.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.445756E 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2628993E 04							
0.4949834E 03	-0.3262809E 04	0.3300141E 04	278.626	278.626	1.000000	1	2.500
-0.1129251E 04	0.7344954E 03	0.1347104E 04	146.959	73.479	0.408196	2	5.000
0.2281759E 03	-0.8448871E 02	0.2433158E 03	339.681	113.227	0.073729	3	7.500
-0.1030649E 04	0.6189772E 02	0.1032506E 04	176.563	44.141	0.312867	4	10.000
0.2205548E 03	0.1750711E 03	0.2815923E 03	38.442	7.688	0.085327	5	12.500
-0.1462868E 03	0.3225403E 03	0.3541638E 03	114.397	19.066	0.107318	6	15.000
-0.4032495E 03	-0.2538516E 03	0.4764983E 03	212.191	30.313	0.144387	7	17.500
0.4862177E 02	-0.8458093E 02	0.9756027E 02	299.893	37.487	0.029562	8	20.000
0.5915353E 02	-0.1885921E 02	0.6208711E 02	342.317	38.035	0.018813	9	22.500
0.7358626E 02	0.2974032E 01	0.7364630E 02	2.314	0.231	0.022316	10	25.000

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 27 FLT 13.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.111518E 05

ZERO POSITION USED 3.11 LOAD/IN USED -20300.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.6831742E 04							
0.6322139E 03	0.5991619E 03	0.8710276E 03	43.462	43.462	0.118512	1	2.500
-0.1351832E 04	-0.7224313E 04	0.7349703E 04	259.401	129.701	1.000000	2	5.000
-0.5385376E 03	-0.1015674E 03	0.5480315E 03	190.680	63.560	0.074565	3	7.500
0.6473687E 03	0.3028410E 04	0.3096829E 04	77.934	19.483	0.421354	4	10.000
-0.1693038E 03	-0.3424778E 03	0.3820403E 03	243.694	48.739	0.051980	5	12.500
-0.9482715E 02	0.2599692E 03	0.2767241E 03	110.040	18.340	0.037651	6	15.000
-0.2043903E 03	-0.3467827E 03	0.4025339E 03	239.485	34.212	0.054769	7	17.500
-0.6003873E 02	-0.1004070E 03	0.1169881E 03	239.122	29.890	0.015917	8	20.000
0.6832207E 01	-0.3518947E 02	0.3584659E 02	280.988	31.221	0.004877	9	22.500
0.2777585E 02	0.9779958E 02	0.1016673E 03	74.145	7.414	0.013833	10	25.000

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 27 FLT 13.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.683798E 04

ZERO POSITION USED 1.15 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.2931968E 03							
0.2907246E 03	0.6533877E 03	0.7151477E 03	66.013	66.013	0.164602	1	2.500
-0.1020051E 04	-0.4223266E 04	0.4344707E 04	256.421	128.211	1.000000	2	5.000
-0.3418376E 03	0.3351776E 02	0.3434768E 03	174.400	58.133	0.079056	3	7.500
0.8955828E 03	0.2224191E 04	0.2397727E 04	68.067	17.017	0.551873	4	10.000
-0.2189032E 03	-0.1389762E 03	0.2592932E 03	212.410	42.482	0.059680	5	12.500
0.7137097E 02	0.2159232E 03	0.2274129E 03	71.709	11.952	0.052343	6	15.000
0.3617770E 02	-0.2962185E 03	0.2984194E 03	276.963	39.566	0.068686	7	17.500
-0.1062038E 03	0.2643181E 02	0.1094435E 03	166.024	20.753	0.025190	8	20.000
-0.5280420E 02	-0.4875096E 02	0.7186749E 02	222.714	24.746	0.016541	9	22.500
-0.2237054E 02	0.6386154E 02	0.6766635E 02	109.305	10.931	0.015574	10	25.000

Table III. (Continued)

TEST 13 N = 13

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 28 FLT 13.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.713989E 04

ZERO POSITION USED 9.51 LOAD/IN USED -41450.00 (FACTOR THESE NUMBERS BY 0.038)

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1317303E 05							
-0.2934470E 04	0.4226859E 04	0.5145625E 04	124.770	124.770	1.000000	1	2.545
-0.7438780E 02	0.3116404E 03	0.3203953E 03	103.425	51.713	0.062266	2	5.089
0.7442356E 03	0.1083340E 03	0.7520791E 03	8.282	2.761	0.146159	3	7.634
-0.1887231E 03	-0.1445980E 03	0.2377498E 03	217.459	54.365	0.046204	4	10.178
-0.1976393E 03	-0.1230345E 03	0.2328063E 03	211.903	42.381	0.045244	5	12.723
0.9765798E 03	-0.9243761E 02	0.9809448E 03	354.593	59.099	0.190637	6	15.267
-0.1332308E 03	0.9247585E 03	0.9343056E 03	98.198	14.028	0.181573	7	17.812
-0.5964583E 02	0.1238238E 03	0.1374407E 03	115.720	14.465	0.026710	8	20.356
-0.4826909E 02	-0.1511133E 02	0.5057921E 02	197.383	21.931	0.009830	9	22.901
0.7699956E 02	-0.7177853E 02	0.1052667E 03	317.010	31.701	0.020458	10	25.445

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 28 FLT 13.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.297423E 04

ZERO POSITION USED 3.75 LOAD/IN USED 25900.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.8792574E 04							
0.3083850E 03	0.8204934E 03	0.8765334E 03	69.401	69.401	0.749129	1	2.545
-0.1071205E 04	-0.4707266E 03	0.1170069E 04	203.722	101.861	1.000000	2	5.089
0.7160723E 03	0.1641700E 03	0.7346504E 03	12.913	4.304	0.627869	3	7.634
0.1457897E 03	-0.2187811E 03	0.2629065E 03	303.678	75.920	0.224693	4	10.178
-0.2448763E 02	-0.1486353E 03	0.1506389E 03	260.644	52.129	0.128744	5	12.723
0.6056331E 03	-0.2888979E 03	0.6710093E 03	334.498	55.750	0.573478	6	15.267
0.1277452E 02	0.4345840E 03	0.4347717E 03	88.316	12.617	0.371578	7	17.812
-0.1056761E 03	-0.8336382E 02	0.1345993E 03	218.269	27.284	0.115035	8	20.356
-0.1753989E 03	-0.1562254E 03	0.2348853E 03	221.691	24.632	0.200745	9	22.901
-0.2582117E 03	-0.1553461E 03	0.3013396E 03	211.032	21.103	0.257540	10	25.445

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 28 FLT 13.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.278338E 04

ZERO POSITION USED 8.27 LOAD/IN USED -30400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.8961836E 04							
0.1237760E 04	-0.3665728E 03	0.1290900E 04	343.503	343.503	0.870051	1	2.545
-0.1221240E 04	-0.8425908E 03	0.1483705E 04	214.604	107.302	1.000000	2	5.089
0.2992861E 03	0.1910362E 03	0.3466716E 03	33.440	11.147	0.233652	3	7.634
-0.5127344E 02	0.2170584E 02	0.5567862E 02	157.055	39.264	0.037527	4	10.178
-0.4592827E 02	-0.1456253E 03	0.1526962E 03	252.495	50.499	0.102915	5	12.723
0.7001277E 03	-0.4374641E 02	0.7014929E 03	356.425	59.404	0.472798	6	15.267
-0.2283677E 03	0.4376519E 03	0.4936506E 03	117.556	16.794	0.332714	7	17.812
-0.2499425E 02	0.1254344E 03	0.1279004E 03	101.269	12.659	0.086203	8	20.356
0.6393229E 01	-0.1357932E 02	0.1500904E 02	295.211	32.801	0.010116	9	22.901
-0.7120035E 02	-0.1476056E 03	0.1638807E 03	244.249	24.425	0.110454	10	25.445

Table III. (Continued)

TEST 13 N = 13 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 28 FLT 13.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.184451E 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2175214E 04							
0.7338660E 03	-0.9753965E 03	0.1220638E 04	306.957	306.957	1.000000	1	2.545
-0.3115330E 03	0.2849861E 03	0.4222202E 03	137.548	68.774	0.345901	2	5.089
0.1206294E 03	0.1398723E 03	0.1847044E 03	49.225	16.408	0.151318	3	7.634
-0.5579063E 03	-0.2480253E 03	0.6105537E 03	203.968	50.992	0.500192	4	10.178
-0.7976291E 02	0.6301671E 02	0.1016525E 03	141.689	28.338	0.083278	5	12.723
-0.3738694E 03	0.1485533E 03	0.4023013E 03	158.330	26.388	0.329583	6	15.267
-0.9735681E 02	-0.2965854E 03	0.3121558E 03	251.827	35.975	0.255732	7	17.812
0.5808777E 02	-0.8684358E 02	0.1044796E 03	303.778	37.972	0.085594	8	20.356
0.8591406E 02	-0.2756155E 02	0.9022672E 02	342.213	38.024	0.073918	9	22.901
0.5504546E 02	0.4353345E 02	0.7017949E 02	38.339	3.834	0.057494	10	25.445

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 28 FLT 13.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.478833E 04

ZERO POSITION USED 3.11 LOAD/IN USED -20300.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.6541750E 04							
0.7395752E 03	0.2769304E 03	0.7897227E 03	20.528	20.528	0.271386	1	2.545
0.1895432E 04	-0.2207990E 04	0.2909962E 04	310.644	155.322	1.000000	2	5.089
0.7148696E 03	-0.5949292E 03	0.9300427E 03	320.232	106.744	0.319606	3	7.634
-0.5678799E 03	0.1096086E 04	0.1234460E 04	117.389	29.347	0.424218	4	10.178
0.1100418E 03	-0.1159653E 03	0.1598660E 03	313.499	62.700	0.054937	5	12.723
-0.1990307E 03	-0.5001030E 02	0.2052176E 03	194.105	32.351	0.070522	6	15.267
0.1226669E 03	-0.1575670E 03	0.1996861E 03	307.901	43.986	0.068622	7	17.812
-0.6938530E 02	0.3095865E 02	0.7597864E 02	155.954	19.494	0.026110	8	20.356
0.4227051E 02	-0.2251974E 02	0.4789503E 02	331.953	36.884	0.016459	9	22.901
0.5097548E 01	-0.6000792E 02	0.6022404E 02	274.855	27.486	0.020696	10	25.445

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 28 FLT 13.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.301675E 04

ZERO POSITION USED 1.15 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.9059299E 02							
0.3224900E 03	0.3359729E 03	0.4657012E 03	46.173	46.173	0.256687	1	2.545
0.1136252E 04	-0.1414402E 04	0.1814277E 04	308.776	154.388	1.000000	2	5.089
0.4270884E 03	-0.3358516E 03	0.5433237E 03	321.819	107.273	0.299471	3	7.634
-0.2923030E 03	0.8939453E 03	0.9405208E 03	108.107	27.027	0.518400	4	10.178
0.8484087E 02	-0.3519177E 02	0.9185002E 02	337.471	67.494	0.050626	5	12.723
-0.1026602E 03	-0.3650137E 02	0.1089562E 03	199.573	33.262	0.060055	6	15.267
0.1074807E 03	-0.1761649E 03	0.2063642E 03	301.388	43.055	0.113745	7	17.812
-0.5648181E 02	-0.2436943E 01	0.5653435E 02	182.471	22.809	0.031161	8	20.356
0.6338840E 02	-0.7712451E 02	0.9983122E 02	309.417	34.380	0.055025	9	22.901
-0.3954733E 02	-0.1428297E 01	0.3957312E 02	182.068	18.207	0.021812	10	25.445

Table III. (Continued)

TEST 13 N = 14

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 29 FLT 13.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.150517E 05

ZERO POSITION USED 9.51 LOAD/IN USED -41450.00 (FACTOR THESE NUMBERS BY 0.038)

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1032189E 05							
-0.5940305E 04	0.1197367E 05	0.1336623E 05	116.387	116.387	1.000000	1	2.532
0.2638457E 04	0.6932686E 03	0.2728016E 04	14.722	7.361	0.204098	2	5.063
0.7703042E 03	0.5230127E 03	0.9310803E 03	34.175	11.392	0.069659	3	7.595
0.5791501E 03	0.1599436E 03	0.6008301E 03	15.439	3.860	0.044951	4	10.127
-0.1296544E 03	-0.2361688E 03	0.2694177E 03	241.234	48.247	0.020157	5	12.658
0.1033266E 04	-0.1515729E 03	0.1044324E 04	351.655	58.609	0.078132	6	15.190
0.4899045E 02	0.7258611E 03	0.7275125E 03	86.139	12.306	0.054429	7	17.722
-0.2286909E 03	0.2816298E 01	0.2287082E 03	179.294	22.412	0.017111	8	20.253
-0.7898892E 02	-0.2965251E 03	0.3068652E 03	255.084	28.343	0.022958	9	22.785
-0.7546255E 02	-0.2014670E 03	0.2151361E 03	249.466	24.947	0.016096	10	25.316

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 29 FLT 13.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.659155E 04

ZERO POSITION USED 3.75 LOAD/IN USED 25900.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.7129246E 04							
-0.1159110E 04	0.5476031E 04	0.5597359E 04	101.951	101.951	1.000000	1	2.532
0.5223005E 03	-0.4380781E 03	0.6816965E 03	320.012	160.006	0.121789	2	5.063
0.5603047E 03	0.2198090E 03	0.6018782E 03	21.420	7.140	0.107529	3	7.595
0.5031211E 03	-0.9506715E 02	0.5120239E 03	349.300	87.325	0.091476	4	10.127
-0.6152777E 02	-0.1074624E 02	0.6245917E 02	189.907	37.981	0.011159	5	12.658
0.5950461E 03	-0.3189910E 03	0.6751555E 03	331.805	55.301	0.120620	6	15.190
0.2264513E 03	0.4799414E 03	0.5306824E 03	64.741	9.249	0.094809	7	17.722
-0.1006933E 03	0.4222243E 02	0.1091873E 03	157.251	19.656	0.019507	8	20.253
0.1812955E 02	-0.7400792E 02	0.7619614E 02	283.764	31.529	0.013613	9	22.785
0.5523003E 00	-0.3149576E 02	0.3150060E 02	271.005	27.100	0.005628	10	25.316

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 29 FLT 13.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.594414E 04

ZERO POSITION USED 8.27 LOAD/IN USED -30400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.6923727E 04							
-0.1663028E 04	0.4752125E 04	0.5034715E 04	109.288	109.288	1.000000	1	2.532
0.5511196E 03	-0.6045279E 02	0.5544253E 03	353.740	176.870	0.110120	2	5.063
0.3463689E 03	0.4462852E 03	0.5649263E 03	52.184	17.395	0.112206	3	7.595
0.3406924E 03	0.4262604E 02	0.3433484E 03	7.132	1.783	0.068196	4	10.127
-0.2085199E 02	-0.3746761E 02	0.4287921E 02	240.903	48.180	0.008517	5	12.658
0.7479639E 03	0.1728531E 02	0.7481636E 03	1.324	0.221	0.148601	6	15.190
0.5837390E 02	0.5801917E 03	0.5831208E 03	84.255	12.036	0.115820	7	17.722
-0.1032272E 03	0.7681966E 01	0.1035126E 03	175.744	21.968	0.020560	8	20.253
-0.1761305E 02	-0.1247496E 03	0.1259868E 03	261.964	29.107	0.025024	9	22.785
0.3416254E 02	-0.1390323E 03	0.1431680E 03	283.805	28.380	0.028436	10	25.316

Table III. (Continued)

TEST 13 N = 14 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 29 FLT 13.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.158101E 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1829888E 04							
0.4078076E 03	-0.2122406E 02	0.4083594E 03	357.021	357.021	0.899284	1	2.532
0.3175771E 03	0.3024956E 03	0.4385872E 03	43.607	21.803	0.965851	2	5.063
0.8899088E 02	0.2756914E 03	0.2896982E 03	72.110	24.037	0.637970	3	7.595
-0.1659955E 02	-0.5755382E 02	0.5989981E 02	253.911	63.478	0.131911	4	10.127
0.1107594E 03	0.5640570E 02	0.1242950E 03	26.988	5.398	0.273721	5	12.658
-0.3242275E 03	0.3179275E 03	0.4540940E 03	135.562	22.594	1.000000	6	15.190
-0.1628266E 03	-0.2500244E 03	0.2983701E 03	236.926	33.847	0.657067	7	17.722
0.5002135E 02	-0.7740220E 01	0.5061665E 02	351.204	43.900	0.111467	8	20.253
0.4039484E 02	-0.3001398E 02	0.5032475E 02	323.387	35.932	0.110825	9	22.785
0.5530692E 02	0.1032706E 02	0.5626280E 02	10.577	1.058	0.123901	10	25.316

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 29 FLT 13.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.526086E 04

ZERO POSITION USED 3.11 LOAD/IN USED -20300.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.6441813E 04							
0.8448169E 03	0.2160851E 03	0.8720139E 03	14.347	14.347	0.332517	1	2.532
0.1449471E 04	0.2185490E 04	0.2622465E 04	56.447	28.223	1.000000	2	5.063
0.3700488E 02	-0.3514167E 03	0.3533596E 03	276.011	92.004	0.134743	3	7.595
-0.1474389E 04	-0.8579902E 03	0.1705863E 04	210.196	52.549	0.650480	4	10.127
-0.2082539E 03	-0.2422418E 02	0.2096581E 03	186.635	37.327	0.079947	5	12.658
-0.1773400E 03	-0.4617393E 02	0.1832525E 03	194.594	32.432	0.069878	6	15.190
0.7187250E 02	-0.2777112E 03	0.2868608E 03	284.510	40.644	0.109386	7	17.722
-0.1078667E 02	-0.4668054E 02	0.4791060E 02	256.989	32.124	0.018269	8	20.253
0.5297673E 02	-0.1923274E 02	0.5635985E 02	340.047	37.783	0.021491	9	22.785
0.1472132E 03	-0.5939821E 02	0.1587447E 03	338.027	33.803	0.060533	10	25.316

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 29 FLT 13.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.321788E 04

ZERO POSITION USED 1.15 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.2209839E 02							
0.3945540E 03	0.2900605E 03	0.4897019E 03	36.322	36.322	0.317056	1	2.532
0.1027326E 04	0.1153326E 04	0.1544526E 04	48.307	24.153	1.000000	2	5.063
0.4195076E 02	-0.2332717E 03	0.2370154E 03	280.197	93.399	0.153455	3	7.595
-0.1085240E 04	-0.3920286E 03	0.1153876E 04	199.862	49.965	0.747075	4	10.127
-0.2162991E 03	0.3711853E 02	0.2194609E 03	170.262	34.052	0.142089	5	12.658
-0.1594035E 03	0.7122348E 01	0.1595626E 03	177.442	29.574	0.103308	6	15.190
0.1719917E 02	-0.1698595E 03	0.1707280E 03	275.782	39.397	0.110537	7	17.722
-0.3304307E 00	0.3920163E 02	0.3920302E 02	90.483	11.310	0.025382	8	20.253
-0.1749535E 02	-0.2739983E 02	0.3250908E 02	237.441	26.382	0.021048	9	22.785
0.1706459E 02	-0.2789734E 02	0.3270262E 02	301.454	30.145	0.021173	10	25.316

Table III. (Continued)

TEST 13 N = 15

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 30 FLT 13.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.307466E 05

ZERO POSITION USED 9.51 LOAD/IN USED -41450.00 (FACTOR THESE NUMBERS BY 0.038)

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.3961532E 04							
-0.1506836E 05	0.2429151E 05	0.2858554E 05	121.812	121.812	1.000000	1	2.513
0.5357840E 04	0.2704391E 04	0.6001680E 04	26.783	13.391	0.209955	2	5.025
0.7792146E 03	0.1228064E 04	0.1454413E 04	57.605	19.202	0.050879	3	7.538
0.1159014E 04	0.4584131E 03	0.1246376E 04	21.580	5.395	0.043602	4	10.050
0.2442116E 03	0.4136588E 02	0.2476902E 03	9.614	1.923	0.008665	5	12.563
0.1108744E 04	0.1991371E 03	0.1125485E 04	10.182	1.697	0.039408	6	15.075
-0.4098513E 03	0.1067438E 04	0.1143416E 04	111.005	15.858	0.040000	7	17.588
-0.2475796E 03	0.7210915E 02	0.2578669E 03	163.761	20.470	0.009021	8	20.100
0.1997458E 03	0.2506531E 02	0.2013123E 03	7.152	0.795	0.007042	9	22.613
-0.1686653E 03	-0.2608125E 03	0.3105979E 03	237.110	23.711	0.010866	10	25.126

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 30 FLT 13.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.166799E 05

ZERO POSITION USED 3.75 LOAD/IN USED 25900.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.3085048E 04							
-0.6222031E 04	0.1428911E 05	0.1558500E 05	113.530	113.530	1.000000	1	2.513
0.3341938E 04	0.3036541E 03	0.3355704E 04	5.192	2.596	0.215316	2	5.025
0.5327361E 03	0.5978057E 03	0.8007368E 03	48.294	16.098	0.051379	3	7.538
0.6817744E 03	0.7531461E 02	0.6859216E 03	6.304	1.576	0.044012	4	10.050
0.1963857E 03	-0.8753314E 02	0.2150103E 03	335.976	67.195	0.013798	5	12.563
0.8309802E 03	0.3776755E 02	0.8318381E 03	2.602	0.434	0.053374	6	15.075
-0.1448079E 03	0.5994548E 03	0.6166973E 03	103.581	14.797	0.039570	7	17.588
-0.1214572E 03	0.1149770E 02	0.1220002E 03	174.592	21.824	0.007828	8	20.100
0.3863802E 02	-0.4861804E 02	0.6210161E 02	308.475	34.275	0.003985	9	22.613
-0.4660345E 02	0.7489453E 02	0.8821036E 02	121.892	12.189	0.005660	10	25.126

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 30 FLT 13.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.148132E 05

ZERO POSITION USED 8.27 LOAD/IN USED -30400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2949035E 04							
-0.6158609E 04	0.1240311E 05	0.1384794E 05	116.406	116.406	1.000000	1	2.513
0.1818151E 04	0.6404109E 03	0.1927641E 04	19.404	9.702	0.139201	2	5.025
0.3701511E 03	0.7796257E 03	0.8630342E 03	64.602	21.534	0.062322	3	7.538
0.7178252E 03	0.3216067E 03	0.7865774E 03	24.134	6.033	0.056801	4	10.050
0.1121257E 03	-0.1055151E 03	0.1539663E 03	316.740	63.348	0.011118	5	12.563
0.6384709E 03	0.3046635E 03	0.7071772E 03	25.466	4.244	0.051067	6	15.075
-0.3801382E 03	0.3590352E 03	0.5228875E 03	136.635	19.519	0.037759	7	17.588
-0.4199837E 02	-0.6950357E 02	0.8120718E 02	238.857	29.857	0.005864	8	20.100
0.2773058E 02	-0.3110134E 01	0.2790443E 02	353.601	39.289	0.002015	9	22.613
-0.9258685E 02	-0.1371297E 03	0.1654595E 03	235.974	23.597	0.011948	10	25.126

Table III. (Continued)

TEST 13 N = 15 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 30 FLT 13.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.322789E 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1100635E 04							
-0.6103787E 03	0.1895063E 04	0.1990935E 04	107.853	107.853	1.000000	1	2.513
0.1310542E 04	0.5523533E 03	0.1422186E 04	22.854	11.427	0.714331	2	5.025
0.5775964E 02	0.4269536E 03	0.4308428E 03	82.296	27.432	0.216402	3	7.538
0.4841851E 03	0.3306143E 03	0.5862942E 03	34.326	8.582	0.294482	4	10.050
-0.4313094E 02	0.3298105E 02	0.5429573E 02	142.596	28.519	0.027271	5	12.563
-0.6436577E 03	0.1332102E 03	0.6572976E 03	168.307	28.051	0.330145	6	15.075
0.2989684E 02	-0.2415827E 03	0.2434256E 03	277.055	39.579	0.122267	7	17.588
0.6007942E 02	-0.7226731E 01	0.6051250E 02	353.141	44.143	0.030394	8	20.100
0.6505106E 01	0.6443657E 02	0.6476405E 02	84.235	9.359	0.032529	9	22.613
0.5710806E 02	-0.3778474E 02	0.6847639E 02	326.510	32.651	0.034394	10	25.126

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 30 FLT 13.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.121283E 05

ZERO POSITION USED 3.11 LOAD/IN USED -20300.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.5762359E 04							
0.1357182E 04	-0.5804136E 03	0.1476083E 04	336.845	336.845	0.181671	1	2.513
-0.2688946E 04	0.7667172E 04	0.8125020E 04	109.326	54.663	1.000000	2	5.025
-0.4453472E 03	-0.2198735E 03	0.4966672E 03	206.276	68.759	0.061128	3	7.538
0.3089732E 02	-0.3914642E 04	0.3914764E 04	270.452	67.613	0.481816	4	10.050
-0.3952366E 03	-0.5376169E 03	0.6672659E 03	233.678	46.736	0.082125	5	12.563
-0.2612341E 03	-0.3637230E 02	0.2637542E 03	187.926	31.321	0.032462	6	15.075
0.1100640E 03	0.8278342E 02	0.1377214E 03	36.948	5.278	0.016950	7	17.588
-0.3195647E 02	-0.7776978E 01	0.3288916E 02	193.678	24.210	0.004048	8	20.100
0.5214270E 02	-0.6192795E 02	0.8095634E 02	310.097	34.455	0.009964	9	22.613
0.5312897E 02	0.6772616E 01	0.5355890E 02	7.265	0.726	0.006592	10	25.126

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 30 FLT 13.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.713967E 04

ZERO POSITION USED 1.15 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.4924902E 03							
0.6332148E 03	-0.3409072E 03	0.7191514E 03	331.703	331.703	0.159776	1	2.513
-0.1254725E 04	0.4322574E 04	0.4500996E 04	106.187	53.093	1.000000	2	5.025
-0.2593416E 03	-0.8005859E 02	0.2714172E 03	197.155	65.718	0.060302	3	7.538
-0.2359041E 03	-0.2827458E 04	0.2837282E 04	265.230	66.308	0.630368	4	10.050
-0.3207773E 03	-0.2893191E 03	0.4319763E 03	222.048	44.410	0.095973	5	12.563
-0.8881662E 02	0.1087044E 03	0.1399878E 03	129.380	21.563	0.031102	6	15.075
0.1986710E 03	-0.9608263E 02	0.2206854E 03	334.190	47.741	0.049030	7	17.588
0.7281900E 02	0.1158625E 02	0.7373495E 02	9.041	1.130	0.016382	8	20.100
0.1253544E 02	-0.4025780E 02	0.4216429E 02	287.295	31.922	0.009368	9	22.613
-0.1586186E 02	0.6947530E 01	0.1731665E 02	156.346	15.635	0.003847	10	25.126

Table III. (Continued)

TEST 14 N = 1

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 32 FLT 14.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.1067[illegible]E 05

ZERO POSITION USED 9.51 LOAD/IN USED -26400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.6963479E 03							
-0.4487500E 04	0.3544196E 04	0.5716301E 04	141.699	141.699	1.000000	1	1.695
0.4292593E 04	0.2797884E 04	0.5123916E 04	33.096	16.548	0.896056	2	3.390
0.2061941E 04	0.9221863E 03	0.2256766E 04	24.096	8.032	0.395006	3	5.085
-0.4492268E 02	0.3192559E 03	0.3224009E 03	96.010	24.502	0.056381	4	6.780
-0.1667169E 03	0.8599181E 02	0.1875876E 03	152.716	30.543	0.032805	5	8.475
-0.1527914E 03	-0.2885147E 02	0.1554910E 03	190.693	31.782	0.027192	6	10.169
-0.1476116E 03	-0.3901742E 03	0.4171619E 03	249.277	35.611	0.072952	7	11.864
0.8085747E 02	-0.1896258E 03	0.2063293E 03	293.072	36.634	0.036082	8	13.559
0.8165918E 03	0.3080142E 03	0.8727512E 03	20.666	2.296	0.152624	9	15.254
0.3208461E 02	-0.2056726E 03	0.2081602E 03	278.867	17.887	0.036402	10	16.949

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 32 FLT 14.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.9364[illegible]E 04

ZERO POSITION USED 3.75 LOAD/IN USED 25900.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.9029626E 03							
-0.3523671E 04	0.1832906E 04	0.3972054E 04	152.519	152.519	0.727220	1	1.695
0.3749522E 04	0.3971672E 04	0.5461969E 04	46.648	23.324	1.000000	2	3.390
0.1720167E 04	0.9746379E 03	0.1977093E 04	29.536	9.845	0.361974	3	5.085
0.5707648E 02	0.4001499E 03	0.4018638E 03	84.706	21.177	0.073575	4	6.780
-0.1037401E 03	0.1744627E 03	0.2029962E 03	120.735	24.147	0.037165	5	8.475
-0.2004910E 03	0.3932474E 02	0.2043112E 03	168.903	28.150	0.037406	6	10.169
-0.1459553E 03	-0.1632429E 03	0.2189776E 03	228.200	32.600	0.040091	7	11.864
0.1137531E 03	-0.1328716E 03	0.1749152E 03	310.567	38.821	0.032024	8	13.559
0.7383975E 03	0.1502366E 03	0.7535261E 03	11.501	1.278	0.137959	9	15.254
-0.1474196E 02	-0.1654063E 03	0.1660639E 03	264.907	26.491	0.030404	10	16.949

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 32 FLT 14.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.7546[illegible]E 04

ZERO POSITION USED 8.27 LOAD/IN USED -30400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.6604148E 04							
-0.3224703E 04	0.1631865E 04	0.3611420E 04	153.137	153.137	0.792333	1	1.695
0.2277337E 04	0.3948253E 04	0.4557957E 04	60.024	30.012	1.000000	2	3.390
0.1535331E 04	0.1086818E 04	0.1882223E 04	35.343	11.781	0.412953	3	5.085
0.1195247E 02	0.3343689E 03	0.3345823E 03	87.953	21.988	0.073406	4	6.780
-0.1094352E 03	0.1921431E 03	0.2211222E 03	119.664	23.933	0.048513	5	8.475
-0.7478949E 02	-0.7230850E 02	0.1040287E 03	224.034	37.339	0.022824	6	10.169
-0.9129008E 02	-0.3100171E 03	0.3231787E 03	253.592	36.227	0.070904	7	11.864
0.2501081E 03	-0.2107240E 03	0.3270454E 03	319.885	39.986	0.071753	8	13.559
0.6356672E 03	0.2751673E 03	0.6926765E 03	23.408	2.601	0.151971	9	15.254
0.2553516E 02	-0.8331911E 02	0.8714421E 02	287.039	28.704	0.019119	10	16.949

Table III. (Continued)

TEST 14 N = 1 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 32 FLT 14.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.327186E 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.3552055E 04							
-0.3313235E 03	-0.5071929E 03	0.6058215E 03	236.845	236.845	0.272086	1	1.695
0.1495073E 04	0.1649954E 04	0.2226504E 04	47.819	23.910	1.000000	2	3.390
0.6925091E 03	0.3950493E 03	0.7973179E 03	29.701	9.900	0.358093	3	5.085
-0.1002172E 03	0.2974446E 03	0.3136738E 03	108.620	27.155	0.140968	4	6.780
0.1300429E 03	0.4396709E 02	0.1378429E 03	18.600	3.720	0.061908	5	8.475
-0.3332248E 02	0.5241837E 02	0.6211339E 02	122.444	20.407	0.027897	6	10.169
0.1601583E 03	0.1926635E 03	0.2500931E 03	50.293	7.185	0.112292	7	11.864
-0.4622962E 02	0.7769051E 02	0.9040424E 02	120.755	15.094	0.040603	8	13.559
-0.5580591E 03	0.6691678E 02	0.5620509E 03	173.162	19.240	0.252432	9	15.254
-0.9945542E 01	0.6138004E 02	0.6216056E 02	99.204	9.920	0.027927	10	16.949

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 32 FLT 14.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.277220E 04

ZERO POSITION USED 3.11 LOAD/IN USED -20300.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.4319087E 03							
0.7665454E 03	-0.2942501E 01	0.7665510E 03	359.780	359.780	0.478525	1	1.695
-0.1374865E 04	0.8220979E 03	0.1601904E 04	149.123	74.561	1.000000	2	3.390
-0.2050049E 03	0.7363713E 02	0.2178966E 03	160.192	53.397	0.136023	3	5.085
0.1367144E 03	-0.4883370E 03	0.5071158E 03	285.640	71.410	0.316569	4	6.780
-0.7294829E 02	0.2037980E 03	0.2736990E 03	105.458	21.092	0.170859	5	8.475
0.6799701E 02	-0.2651394E 03	0.2737197E 03	284.384	47.397	0.170871	6	10.169
0.5021476E 02	0.7950052E 02	0.9408189E 02	57.742	8.249	0.058731	7	11.864
-0.8184760E 02	0.2896484E 02	0.8682159E 02	160.512	20.064	0.054199	8	13.559
-0.1950750E 03	0.2038654E 02	0.1961380E 03	174.034	19.337	0.122441	9	15.254
-0.5062302E 02	0.5350997E 02	0.7351627E 02	133.519	13.352	0.045893	10	16.949

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 32 FLT 14.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.213667E 04

ZERO POSITION USED 1.15 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.2337297E 04							
0.4429794E 03	-0.1458514E 02	0.4432192E 03	358.114	358.114	0.566704	1	1.695
-0.6960020E 03	0.3627693E 03	0.7848696E 03	152.471	76.235	1.000000	2	3.390
-0.2022824E 03	0.2322893E 02	0.2036116E 03	173.449	57.816	0.259421	3	5.085
0.1490869E 03	-0.3190996E 03	0.3524046E 03	295.131	73.783	0.449074	4	6.780
-0.1063759E 03	0.2469408E 03	0.2688704E 03	113.305	22.661	0.342577	5	8.475
0.7636067E 02	-0.1927194E 03	0.2072962E 03	291.615	48.602	0.264115	6	10.169
0.5066205E 01	0.9368936E 01	0.1066177E 02	61.486	8.784	0.013527	7	11.864
0.2432684E 02	0.6693429E 02	0.7121063E 02	70.026	8.753	0.090737	8	13.559
-0.1106641E 03	-0.2624084E 01	0.1107152E 03	181.358	20.151	0.141062	9	15.254
-0.6691466E 02	0.4085861E 02	0.7840279E 02	148.591	14.859	0.099893	10	16.949

Table III. (Continued)

TEST 14 N = 2

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 33 FLT 14.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.163673E 05

ZERO POSITION USED 9.51 LOAD/IN USED -26400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2745151E 04							
-0.6299047E 04	0.4748598E 04	0.7888418E 04	142.989	142.989	0.761597	1	1.661
0.1006177E 05	0.2374969E 04	0.1035773E 05	13.256	6.626	1.000000	2	3.322
0.3064097E 04	0.5153025E 03	0.3107125E 04	9.546	3.182	0.299981	3	4.983
-0.5179317E 02	0.3717332E 03	0.3753240E 03	97.932	24.483	0.036236	4	6.645
-0.1286980E 03	0.1531411E 03	0.2000367E 03	130.043	26.009	0.019313	5	8.306
-0.2363345E 03	-0.1466465E 03	0.2781350E 03	211.820	35.303	0.026855	6	9.967
-0.1969635E 03	-0.1254846E 03	0.2318500E 03	212.767	30.395	0.022385	7	11.628
0.1223730E 03	-0.1142430E 02	0.1229057E 03	354.667	44.333	0.011866	8	13.289
0.8336733E 04	-0.8451697E 02	0.8379465E 03	354.211	39.357	0.080901	9	14.950
-0.3307778E 03	-0.3829924E 03	0.5060603E 03	229.184	22.918	0.048856	10	16.611

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 33 FLT 14.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.153937E 05

ZERO POSITION USED 3.75 LOAD/IN USED 25900.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.5911333E 02							
-0.5764539E 04	0.3897458E 04	0.6958453E 04	145.937	145.937	0.655865	1	1.661
0.1038600E 05	0.2164779E 04	0.1060927E 05	11.774	5.887	1.000000	2	3.322
0.3181930E 04	0.3815779E 03	0.3204709E 04	6.835	2.278	0.302067	3	4.983
-0.1139929E 03	0.5167307E 03	0.5291550E 03	102.440	25.610	0.049877	4	6.645
-0.2727917E 03	0.2044321E 03	0.2676741E 03	130.205	26.041	0.025230	5	8.306
-0.1379615E 03	0.3548837E 02	0.1424520E 03	165.574	27.596	0.013427	6	9.967
-0.8391515E 02	-0.1517588E 03	0.1743908E 03	240.484	34.355	0.016438	7	11.628
-0.4363628E 02	-0.1629199E 03	0.1686624E 03	255.006	31.876	0.015898	8	13.289
0.7141321E 03	-0.2073736E 03	0.7436318E 03	343.607	38.201	0.070093	9	14.950
-0.1550427E 03	-0.2398575E 03	0.2856045E 03	237.122	23.712	0.026920	10	16.611

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 33 FLT 14.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.141055E 05

ZERO POSITION USED 8.27 LOAD/IN USED -30400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.7116672E 04							
-0.5377916E 04	0.3567403E 04	0.6453555E 04	146.442	146.442	0.729836	1	1.661
0.8179109E 04	0.3360288E 04	0.8842477E 04	22.335	11.167	1.000000	2	3.322
0.2802788E 04	0.6989679E 03	0.2888629E 04	14.003	4.668	0.326676	3	4.983
-0.2380130E 03	0.4090250E 03	0.4732356E 03	120.195	30.049	0.053518	4	6.645
-0.1312735E 03	0.7759142E 02	0.1524699E 03	149.414	29.883	0.017245	5	8.306
-0.1497145E 03	-0.1716406E 03	0.2279116E 03	228.936	36.156	0.025775	6	9.967
-0.1624748E 03	-0.1633760E 03	0.2304122E 03	225.158	32.165	0.026057	7	11.628
0.1102649E 03	-0.1395314E 03	0.1778407E 03	308.318	38.540	0.020112	8	13.289
0.9152742E 03	0.4576302E 02	0.9164175E 03	2.862	0.318	0.103638	9	14.950
-0.7316101E 04	-0.1720313E 03	0.1869419E 03	246.961	24.696	0.021141	10	16.611

Table III. (Continued)

TEST 14 N = 2 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 33 FLT 14.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.474502E 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.3066763E 04							
-0.9082837E 03	0.8596695E 02	0.9123430E 03	174.593	174.593	0.249943	1	1.661
0.3492104E 04	0.1082631E 04	0.3650402E 04	16.925	8.462	1.000000	2	3.322
0.1116916E 04	0.6659424E 02	0.1120690E 04	3.406	1.135	0.307076	3	4.983
-0.8059717E 02	0.3045627E 03	0.3150466E 03	104.823	26.206	0.086309	4	6.645
0.1456789E 03	0.8069200E 02	0.1665339E 03	28.982	5.796	0.045623	5	8.306
0.3457686E 02	0.1101231E 02	0.3628815E 02	17.666	2.944	0.009941	6	9.967
0.1938127E 03	0.6902191E 02	0.2057362E 03	19.602	2.800	0.056363	7	11.628
0.6181566E 02	0.5626212E 02	0.8359949E 02	42.317	5.290	0.022903	8	13.289
-0.5273994E 03	0.1766987E 03	0.5562126E 03	161.477	17.942	0.152379	9	14.950
0.1297543E 03	0.5033160E 02	0.1391742E 03	21.201	2.120	0.038128	10	16.611

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 33 FLT 14.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.589091E 04

ZERO POSITION USED 3.11 LOAD/IN USED -20300.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.1913475E 03							
0.9223906E 03	-0.1359944E 03	0.9323621E 03	351.613	351.613	0.292933	1	1.661
-0.1468458E 04	0.2694712E 04	0.3068850E 04	118.588	59.294	0.964184	2	3.322
0.2891746E 03	0.2075812E 03	0.3599663E 03	35.672	11.891	0.111839	3	4.983
-0.7391336E 03	-0.3095837E 04	0.3182848E 04	256.572	64.143	1.000000	4	6.645
-0.8730757E 03	-0.6537913E 03	0.1090736E 04	216.827	43.365	0.342692	5	8.306
-0.3209405E 03	0.1087410E 03	0.3384829E 03	161.261	26.877	0.106340	6	9.967
-0.4345126E 02	0.1917307E 03	0.1965926E 03	102.769	14.681	0.061760	7	11.628
0.5724289E 02	0.2814529E 03	0.2870190E 03	78.496	9.812	0.090177	8	13.289
-0.1938266E 03	0.2159251E 03	0.2901594E 03	131.913	14.657	0.091163	9	14.950
-0.1055692E 03	0.1962748E 03	0.2228647E 03	118.274	11.827	0.070020	10	16.611

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 33 FLT 14.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.369553E 04

ZERO POSITION USED 1.15 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.2070344E 04							
0.5171367E 03	-0.4330350E 02	0.5189465E 03	355.213	355.213	0.269092	1	1.661
-0.8866279E 03	0.1417641E 04	0.1672174E 04	122.029	61.014	0.867081	2	3.322
0.7782275E 02	0.1227375E 03	0.1453302E 03	57.623	19.208	0.075359	3	4.983
-0.5226504E 03	-0.1856279E 04	0.1928510E 04	254.269	63.567	1.000000	4	6.645
-0.6249390E 03	-0.2973398E 03	0.6916177E 03	205.462	41.092	0.358628	5	8.306
-0.2284552E 03	0.9175797E 02	0.2481936E 03	158.117	26.353	0.127660	6	9.967
-0.1526429E 03	0.1025702E 03	0.1840529E 03	146.132	20.876	0.095438	7	11.628
0.1627164E 03	0.1349126E 03	0.2113718E 03	39.663	4.958	0.109604	8	13.289
-0.1881054E 02	0.1506583E 03	0.1518281E 03	97.117	10.791	0.078728	9	14.950
-0.1190005E 03	0.2160354E 03	0.2466423E 03	118.848	11.885	0.127893	10	16.611

Table III. (Continued)

TEST 14 N = 3

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 34 FLT 14.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.536685E 04

ZERO POSITION USED 9.51 LOAD/IN USED -26400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.4619238E 04							
-0.2097660E 04	0.2384462E 04	0.3175836E 04	131.339	131.339	1.000000	1	1.661
-0.1076424E 04	0.1903330E 04	0.2186630E 04	119.490	59.745	0.688521	2	3.322
0.1051885E 04	0.1001220E 04	0.1452207E 04	43.566	14.529	0.457268	3	4.983
-0.3067466E 02	0.4241111E 03	0.4252186E 03	94.137	23.534	0.133892	4	6.645
-0.1545541E 03	0.3721699E 03	0.4024850E 03	112.552	22.510	0.126891	5	8.306
-0.1920458E 03	0.2982477E 02	0.1943479E 03	171.172	28.529	0.061196	6	9.967
-0.1363595E 03	-0.1356545E 03	0.1923717E 03	224.860	32.123	0.060574	7	11.628
0.5598763E 02	-0.4794534E 02	0.7371135E 02	319.465	39.928	0.023210	8	13.289
0.4670066E 03	-0.3094026E 03	0.5602012E 03	326.475	36.275	0.176395	9	14.950
-0.1415673E 03	-0.3089714E 03	0.3398596E 03	245.363	24.538	0.107014	10	16.611

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 34 FLT 14.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.622982E 04

ZERO POSITION USED 3.75 LOAD/IN USED 25900.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.5244063E 04							
-0.1064164E 04	0.7143691E 03	0.1281705E 04	146.127	146.127	0.370847	1	1.661
-0.8905723E 03	0.3339443E 04	0.3456153E 04	104.932	52.466	1.000000	2	3.322
0.1340532E 04	0.9199236E 03	0.1625818E 04	34.459	11.486	0.470412	3	4.983
0.1077753E 03	0.5273000E 03	0.5382014E 03	78.448	19.612	0.155723	4	6.645
0.4850904E 02	0.3601604E 03	0.3634126E 03	82.329	16.466	0.105149	5	8.306
-0.1969246E 03	0.1635219E 03	0.2559604E 03	140.295	23.382	0.074061	6	9.967
-0.1770410E 03	0.2415707E 02	0.1786616E 03	172.230	24.604	0.051700	7	11.628
0.1271137E 02	-0.1646690E 02	0.2080234E 02	307.666	38.458	0.006019	8	13.289
0.6690353E 02	-0.6461865E 03	0.6496406E 03	275.911	30.657	0.187966	9	14.950
-0.3171392E 03	0.4462543E 02	0.3202652E 03	171.990	17.199	0.092665	10	16.611

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 34 FLT 14.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.698201E 04

ZERO POSITION USED 8.27 LOAD/IN USED -30400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.5139441E 04							
-0.6708926E 03	0.5147534E 03	0.8456169E 03	142.502	142.502	0.170084	1	1.661
-0.2767606E 04	0.4130234E 04	0.4971766E 04	123.825	61.913	1.000000	2	3.322
0.1204394E 04	0.1124465E 04	0.1647721E 04	43.034	14.345	0.331416	3	4.983
0.2915039E 02	0.4709646E 03	0.4718857E 03	86.458	21.615	0.094913	4	6.645
0.7167046E 02	0.4631572E 03	0.4686697E 03	81.209	16.241	0.094266	5	8.306
-0.1172503E 03	0.2455113E 03	0.2720723E 03	115.528	19.295	0.054723	6	9.967
-0.3029119E 03	0.2164336E 03	0.3718823E 03	144.409	20.630	0.074799	7	11.628
-0.1132662E 03	0.1806262E 02	0.1146974E 03	170.939	21.367	0.023070	8	13.289
-0.2550383E 03	-0.5625581E 03	0.6359390E 03	246.357	27.373	0.127910	9	14.950
-0.2821228E 03	0.1394746E 02	0.2824673E 03	177.170	17.717	0.056814	10	16.611

Table III. (Continued)

TEST 14 N = 3 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 34 FLT 14.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.217388E 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1672957E 04							
0.1430656E 03	-0.7262458E 03	0.7402031E 03	281.144	281.144	0.534760	1	1.661
0.7331882E 01	0.1384160E 04	0.1384178E 04	89.696	44.848	1.000000	2	3.322
0.5117460E 03	0.3697944E 03	0.6313752E 03	35.852	11.951	0.456137	3	4.983
-0.6906342E 02	0.3087102E 03	0.3213008E 03	106.093	26.523	0.232124	4	6.645
0.1882267E 03	0.1640213E 02	0.1889400E 03	4.980	0.996	0.136500	5	8.306
0.1357835E 03	-0.6737061E 01	0.1359505E 03	357.159	59.527	0.098217	6	9.967
0.2185491E 03	0.1336201E 02	0.2189573E 03	3.499	0.500	0.158166	7	11.628
-0.4045613E 02	0.8521169E 02	0.9432776E 02	115.397	14.425	0.068147	8	13.289
0.4414097E 02	0.4315766E 03	0.4336301E 03	84.160	9.351	0.313421	9	14.950
0.1175496E 03	-0.2975464E 02	0.1212569E 03	345.795	34.580	0.087602	10	16.611

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 34 FLT 14.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.570169E 04

ZERO POSITION USED 3.11 LOAD/IN USED -20300.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.3340909E 04							
0.7397866E 03	-0.6684798E 02	0.7428008E 03	354.637	354.837	0.267247	1	1.661
-0.1177609E 04	-0.7479854E 03	0.1395079E 04	212.423	106.211	0.501925	2	3.322
-0.7226151E 02	-0.1123384E 03	0.1335834E 03	237.242	79.081	0.048061	3	4.983
-0.2667163E 04	0.7820547E 03	0.2779455E 04	163.658	40.915	1.000000	4	6.645
-0.2767136E 03	0.1296706E 04	0.1327917E 04	102.028	20.406	0.477762	5	8.306
0.1667410E 03	-0.1463853E 03	0.2218811E 03	318.719	53.120	0.079829	6	9.967
0.1280443E 02	0.1835605E 03	0.1840066E 03	86.010	12.287	0.066202	7	11.628
0.1529504E 03	0.4155621E 02	0.1584958E 03	15.201	1.900	0.057024	8	13.289
-0.7457605E 02	0.3048777E 03	0.3138662E 03	103.745	11.527	0.112924	9	14.950
0.5954498E 02	0.1655628E 03	0.1759449E 03	70.219	7.022	0.063302	10	16.611

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 34 FLT 14.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.369553E 04

ZERO POSITION USED 1.15 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.8339321E 01							
0.3411641E 03	0.9705759E 02	0.3547012E 03	15.880	15.880	0.209581	1	1.661
-0.6102224E 03	-0.9624363E 03	0.8498835E 03	222.666	111.333	0.490350	2	3.322
-0.6287233E 02	-0.8745265E 02	0.1077705E 03	234.287	78.096	0.063641	3	4.983
-0.1598250E 04	0.5567046E 03	0.1692431E 04	160.796	40.199	1.000000	4	6.645
-0.1657157E 03	0.9417793E 03	0.9562476E 03	99.980	19.996	0.565014	5	8.306
0.1237135E 03	-0.9005621E 02	0.1336506E 03	337.971	56.328	0.078655	6	9.967
-0.3902307E 02	0.1441447E 03	0.1493335E 03	105.148	15.021	0.088236	7	11.628
0.1414192E 03	-0.4019705E 02	0.1470210E 03	344.133	43.017	0.086870	8	13.289
-0.1817474E 02	0.1811090E 03	0.1820167E 03	95.731	10.637	0.107549	9	14.950
-0.2230591E 02	0.9908594E 02	0.1015657E 03	102.687	10.269	0.060012	10	16.611

Table III (Continued)

TEST 14 N = 4

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 35 FLT 14.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.741528E 04

ZERO POSITION USED 9.51 LOAD/IN USED -26400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.5191441E 04							
-0.9640164E 03	0.1712267E 04	0.1964990E 04	119.380	119.380	0.381706	1	1.667
-0.4544750E 04	0.2417904E 04	0.5147914E 04	151.946	75.993	1.000000	2	3.333
0.5649462E 03	0.6689353E 03	0.8755769E 03	49.817	16.606	0.170064	3	5.000
-0.1488200E 03	0.9835750E 03	0.9945733E 03	98.606	24.652	0.193199	4	6.667
-0.2106745E 03	0.2634727E 03	0.3373447E 03	128.640	25.729	0.065530	5	8.333
-0.2286662E 03	-0.9410036E 02	0.2472718E 03	202.368	33.728	0.048035	6	10.000
-0.1752081E 03	-0.2949219E 03	0.3430405E 03	239.286	34.184	0.066637	7	11.667
0.1734570E 03	-0.2937227E 03	0.3411165E 03	300.504	37.570	0.066263	8	13.333
0.4537197E 03	-0.3788848E 03	0.5911135E 03	320.136	35.571	0.114826	9	15.000
-0.3183535E 03	-0.3257212E 03	0.4554592E 03	225.655	22.566	0.088475	10	16.667

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 35 FLT 14.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.791791E 04

ZERO POSITION USED 3.75 LOAD/IN USED 25900.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.5962316E 04							
0.5685764E 02	-0.7440385E 02	0.9364143E 02	307.386	307.386	0.014701	1	1.667
-0.4778383E 04	0.4211629E 04	0.6369516E 04	138.607	69.304	1.000000	2	3.333
0.6865288E 03	0.8972349E 03	0.1129756E 04	52.578	17.526	0.177369	3	5.000
-0.3242058E 03	0.9955771E 03	0.9996128E 03	108.925	27.231	0.156937	4	6.667
-0.1792727E 03	0.2825139E 03	0.3345935E 03	122.398	24.480	0.052530	5	8.333
-0.1562904E 03	0.6972243E 02	0.1711375E 03	155.958	25.993	0.026868	6	10.000
-0.1793398E 03	-0.1716425E 03	0.2482416E 03	223.744	31.963	0.038973	7	11.667
0.7879231E 02	-0.2655916E 03	0.2770325E 03	286.524	35.815	0.043493	8	13.333
0.4233318E 03	-0.5182146E 03	0.6691460E 03	309.245	34.361	0.105054	9	15.000
-0.3555950E 03	-0.1810714E 03	0.3990420E 03	206.985	20.699	0.062649	10	16.667

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 35 FLT 14.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.910491E 04

ZERO POSITION USED 8.27 LOAD/IN USED -30400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.5696664E 04							
0.7486736E 03	-0.5157573E 03	0.9091304E 03	325.437	325.437	0.113025	1	1.667
-0.7254344E 04	0.3474753E 04	0.8043594E 04	154.406	77.203	1.000000	2	3.333
0.2973655E 03	0.1183264E 04	0.1220062E 04	75.892	25.297	0.151681	3	5.000
-0.8098517E 02	0.8605559E 03	0.8643579E 03	95.376	23.844	0.107459	4	6.667
-0.1315700E 03	0.4211484E 03	0.4412219E 03	107.349	21.470	0.054854	5	8.333
-0.2233127E 03	0.9590483E 02	0.2430356E 03	156.758	26.126	0.030215	6	10.000
-0.3048799E 03	-0.1893767E 03	0.3589084E 03	211.847	30.264	0.044620	7	11.667
0.2066209E 03	-0.2801142E 03	0.3480735E 03	306.414	38.302	0.043273	8	13.333
0.4791519E 03	-0.2591860E 03	0.5447605E 03	331.590	36.843	0.067726	9	15.000
-0.1747762E 03	0.3306749E 02	0.1778769E 03	169.286	16.929	0.022114	10	16.667

Table III. (Continued)

TEST 14 N = 4 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 35 FLT 14.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.340355E 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1771598E 04							
0.5458564E 03	-0.1000831E 04	0.1140009E 04	298.608	298.608	0.544319	1	1.667
-0.1162594E 04	0.1742065E 04	0.2094377E 04	123.718	61.859	1.000000	2	3.333
0.2097986E 03	0.4634954E 03	0.5087666E 03	65.646	21.882	0.242920	3	5.000
-0.5258447E 02	0.1578857E 03	0.1664122E 03	108.421	27.105	0.079457	4	6.667
0.1237417E 03	0.2635924E 02	0.1265161E 03	12.025	2.405	0.060408	5	8.333
0.1542007E 03	0.4049971E 02	0.1610593E 03	16.781	2.797	0.076901	6	10.000
0.1157862E 03	0.1175820E 03	0.1650212E 03	45.441	6.492	0.078792	7	11.667
-0.1728086E 02	0.2496816E 03	0.2504784E 03	93.956	11.745	0.119596	8	13.333
-0.1730615E 03	0.4613180E 03	0.4927119E 03	110.563	12.285	0.235255	9	15.000
0.2092457E 03	0.6599316E 02	0.2194057E 03	17.505	1.750	0.104759	10	16.667

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 35 FLT 14.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.156566E 05

ZERO POSITION USED 3.11 LOAD/IN USED -20300.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.3446912E 04							
0.7390801E 03	-0.8520561E 02	0.7439753E 03	353.424	353.424	0.055194	1	1.667
-0.7369729E 03	-0.2190771E 04	0.2311407E 04	251.407	125.704	0.171480	2	3.333
-0.1130082E 03	-0.1428866E 03	0.1821742E 03	231.660	77.220	0.013515	3	5.000
-0.9233695E 04	0.9819738E 04	0.1347918E 05	133.238	33.310	1.000000	4	6.667
-0.2560313E 03	0.5572927E 03	0.6132920E 03	114.675	22.935	0.045499	5	8.333
0.1027043E 02	-0.4111619E 03	0.4112903E 03	271.432	45.239	0.030513	6	10.000
-0.9749891E 01	0.1250121E 03	0.1253918E 03	94.460	13.494	0.009303	7	11.667
0.2120916E 03	-0.1863416E 03	0.2823225E 03	318.698	39.837	0.020945	8	13.333
0.6330436E 02	0.1423798E 03	0.1558430E 03	66.009	7.334	0.011562	9	15.000
-0.2544138E 02	0.2586669E 02	0.3608243E 02	134.837	13.484	0.002677	10	16.667

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 35 FLT 14.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.960336E 04

ZERO POSITION USED 1.15 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.6181532E 01							
0.3589036E 03	0.1433695E 03	0.3865354E 03	21.772	21.772	0.046332	1	1.667
-0.2816289E 03	-0.1346193E 04	0.1375336E 04	258.184	129.092	0.164854	2	3.333
0.2780265E 02	-0.1430461E 03	0.1457344E 03	281.022	93.674	0.017466	3	5.000
-0.5390680E 04	0.6367246E 04	0.8342734E 04	130.252	32.563	1.000000	4	6.667
-0.3371135E 03	0.5234746E 03	0.6226323E 03	122.781	24.556	0.074632	5	8.333
0.4895870E 02	-0.9585093E 02	0.1001357E 03	286.810	47.802	0.012003	6	10.000
0.3862564E 02	0.7015591E 02	0.8008614E 02	61.164	8.738	0.009600	7	11.667
0.3079629E 03	-0.2339533E 03	0.3867375E 03	322.779	40.347	0.046356	8	13.333
-0.4891267E 02	0.1840260E 03	0.1904156E 03	104.885	11.654	0.022824	9	15.000
-0.1773102E 02	0.1656194E 03	0.1665658E 03	96.111	9.611	0.019965	10	16.667

Table III. (Continued)

TEST 14 N = 5

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 36 FLT 14.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.112253E 05

ZERO POSITION USED 9.51 LOAD/IN USED -26400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.6348367E 04							
0.1263317E 04	-0.3067832E 03	0.1300032E 04	346.350	346.350	0.136509	1	1.631
-0.8924703E 04	0.3323432E 04	0.9523418E 04	159.575	79.788	1.000000	2	3.263
-0.1880261E 02	0.1556238E 04	0.1556351E 04	90.691	30.230	0.163434	3	4.894
0.2074283E 02	0.1271913E 04	0.1272082E 04	89.066	22.266	0.133574	4	6.525
-0.2660526E 03	0.4015561E 03	0.4831367E 03	123.704	24.757	0.050732	5	8.157
-0.2379005E 03	-0.2135200E 01	0.2379101E 03	180.514	30.086	0.024982	6	9.788
-0.2670579E 03	-0.1013564E 03	0.2856436E 03	200.783	28.683	0.029994	7	11.419
0.1559543E 03	-0.2062314E 03	0.3225259E 03	298.917	37.365	0.033867	8	13.051
0.6294341E 03	-0.1644809E 03	0.6502698E 03	345.355	38.373	0.068313	9	14.682
-0.4121052E 03	0.2352412E 03	0.4745198E 03	150.281	15.028	0.049827	10	16.313

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 36 FLT 14.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.988734E 04

ZERO POSITION USED 5.75 LOAD/IN USED 25900.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.5513559E 04							
0.4222363E 04	0.8902373E 03	0.4315188E 04	11.906	11.906	0.817433	1	1.631
-0.4443262E 04	0.2850396E 04	0.5278549E 04	147.319	73.660	1.000000	2	3.263
-0.1800645E 03	-0.1557392E 04	0.1567769E 04	263.404	87.801	0.296985	3	4.894
-0.5581028E 03	0.3933594E 03	0.6839506E 03	144.686	36.172	0.129562	4	6.525
-0.5526331E 02	-0.4666802E 03	0.4719270E 03	263.275	52.655	0.089398	5	8.157
-0.5074031E 03	-0.5342327E 03	0.7367920E 03	226.475	37.746	0.139572	6	9.788
-0.1131881E 03	-0.5433242E 03	0.5549890E 03	258.232	36.890	0.105132	7	11.419
-0.2469456E 03	-0.5449089E 03	0.5982539E 03	245.621	30.703	0.113328	8	13.051
0.6123530E 03	-0.3167856E 03	0.6903625E 03	332.499	36.944	0.130776	9	14.682
-0.3789688E 03	-0.3404694E 02	0.3805676E 03	185.254	18.525	0.072092	10	16.313

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 36 FLT 14.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.141999E 05

ZERO POSITION USED 8.27 LOAD/IN USED -30400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.8300914E 04							
0.2371174E 04	-0.1935571E 04	0.3060866E 04	320.775	320.775	0.202146	1	1.631
-0.1079424E 05	0.4421740E 04	0.1166762E 05	157.588	78.794	1.000000	2	3.263
-0.4780132E 03	0.1420601E 04	0.1498867E 04	108.597	36.199	0.128369	3	4.894
0.1552810E 03	0.8635129E 03	0.8970547E 03	80.032	20.008	0.076628	4	6.525
-0.3465060E 03	0.3318047E 03	0.4796082E 03	136.225	27.245	0.041076	5	8.157
-0.2256000E 03	0.2426620E 03	0.3314778E 03	132.890	22.148	0.028389	6	9.788
-0.3222100E 03	-0.6840137E 02	0.3293970E 03	191.985	27.426	0.028211	7	11.419
0.2793943E 03	-0.1978355E 03	0.3423438E 03	324.696	40.587	0.029320	8	13.051
0.7327200E 03	-0.1976456E 03	0.7589150E 03	344.904	38.323	0.064997	9	14.682
-0.3528359E 03	0.2576503E 02	0.3537709E 03	175.820	17.582	0.030299	10	16.313

Table III. (Continued)

TEST 14 M = 5 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 36 FLT 14.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.478694E 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.3315492E 04							
0.9322986E 03	-0.1337510E 04	0.1630371E 04	304.878	304.878	0.517587	1	1.631
-0.2512208E 04	0.1900260E 04	0.3149949E 04	142.896	71.448	1.000000	2	3.263
0.1111225E 03	0.6766252E 03	0.6856895E 03	80.673	26.891	0.217683	3	4.894
-0.9002284E 02	0.2200817E 03	0.2377816E 03	112.247	28.062	0.075487	4	6.525
0.1261077E 03	0.9209545E 02	0.1367108E 03	22.649	4.530	0.043401	5	8.157
0.2067256E 03	-0.8216341E 02	0.2224533E 03	338.324	56.387	0.070621	6	9.788
0.1629904E 03	0.3245076E 02	0.1661899E 03	11.260	1.609	0.052760	7	11.419
-0.1042510E 03	0.2674245E 03	0.2870261E 03	111.298	13.912	0.091121	8	13.051
-0.4041145E 03	0.3029797E 03	0.5050774E 03	143.140	15.904	0.160345	9	14.682
0.2827576E 03	-0.2460091E 03	0.3747964E 03	318.976	31.898	0.118985	10	16.313

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 36 FLT 14.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.182398E 05

ZERO POSITION USED 3.11 LOAD/IN USED -20300.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.1587740E 04							
0.8293716E 03	0.1317835E 03	0.8397761E 03	9.029	9.029	0.058805	1	1.631
-0.1849239E 03	-0.3821147E 04	0.3825019E 04	267.229	133.615	0.267887	2	3.263
-0.6006293E 01	-0.5795977E 03	0.5796287E 03	269.406	89.802	0.040588	3	4.894
-0.5879906E 04	0.1301405E 05	0.1426072E 05	114.314	28.579	1.000000	4	6.525
-0.1827260E 04	0.2119218E 03	0.1839508E 04	173.385	34.677	0.128811	5	8.157
0.2466385E 03	-0.1947169E 03	0.3142532E 03	321.712	53.619	0.022005	6	9.788
-0.3521777E 02	0.4183369E 03	0.4190180E 03	94.812	13.545	0.029398	7	11.419
0.1362103E 03	-0.1568750E 03	0.2077571E 03	310.967	38.871	0.014548	8	13.051
-0.1996323E 03	0.1727262E 03	0.2639836E 03	139.133	15.459	0.018485	9	14.682
-0.4026974E 02	0.2576350E 03	0.2609607E 03	98.877	9.888	0.018274	10	16.313

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 36 FLT 14.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.112626E 05

ZERO POSITION USED 1.15 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.1598859E 04							
0.3745166E 03	0.2911838E 03	0.4743950E 03	37.865	37.865	0.054449	1	1.631
0.3329318E 01	-0.2261306E 04	0.2261374E 04	270.135	135.068	0.259550	2	3.263
-0.1501910E 02	-0.3664688E 03	0.3667764E 03	267.053	89.218	0.042097	3	4.894
-0.2931779E 04	0.8204594E 04	0.8712672E 04	109.669	27.416	1.000000	4	6.525
-0.1186282E 04	0.2556050E 03	0.1213519E 04	167.838	33.568	0.139282	5	8.157
0.2489413E 03	-0.9942627E 02	0.2680623E 03	338.228	56.371	0.030767	6	9.788
-0.1906001E 03	0.3405334E 03	0.4346794E 03	116.040	16.578	0.049890	7	11.419
0.1155655E 03	-0.2436253E 03	0.2696531E 03	295.381	36.923	0.030950	8	13.051
0.4380096E 02	0.1905024E 03	0.1954730E 03	77.051	8.561	0.022435	9	14.682
-0.1797504E 02	0.3822344E 03	0.3826794E 03	92.841	9.284	0.041627	10	16.313

Table III. (Continued)

TEST 14 N = 6

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 37 FLT 14.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.491620E 04

ZERO POSITION USED 9.51 LOAD/IN USED -26400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.4668090E 04							
-0.2285338E 04	0.2515811E 04	0.3398834E 04	132.252	132.252	1.000000	1	1.667
-0.6459492E 03	0.1089725E 04	0.1266787E 04	120.658	60.329	0.372712	2	3.333
0.8205186E 03	0.8521895E 03	0.1182995E 04	46.085	15.362	0.348059	3	5.000
-0.2447598E 03	0.2351807E 03	0.3394368E 03	136.143	34.036	0.099869	4	6.667
-0.7124092E 03	0.1821351E 03	0.2798049E 03	139.365	27.879	0.082324	5	8.333
-0.1654129E 03	-0.8956683E 02	0.1881054E 03	208.434	34.739	0.055344	6	10.000
-0.2169366E 03	-0.2090271E 03	0.3012537E 03	223.936	31.991	0.088634	7	11.667
-0.1740309E 02	-0.1705698E 03	0.1714553E 03	264.174	33.022	0.050445	8	13.333
0.4799880E 03	-0.3343146E 03	0.5847686E 03	325.167	36.130	0.172050	9	15.000
-0.6990050E 02	-0.3454099E 03	0.3524119E 03	258.559	25.856	0.103686	10	16.667

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 37 FLT 14.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.980695E 04

ZERO POSITION USED 3.75 LOAD/IN USED 25900.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.3788328E 03							
0.5838350E 03	0.2093408E 04	0.2173297E 04	74.417	74.417	0.540053	1	1.667
0.8265894E 03	0.9808472E 03	0.1282697E 04	49.878	24.939	0.318743	2	3.333
0.2513160E 04	-0.3143002E 04	0.4024230E 04	308.646	102.882	1.000000	3	5.000
-0.4016255E 03	0.9902266E 03	0.1066574E 04	112.077	28.019	0.265535	4	6.667
-0.2062504E 03	0.6136343E 03	0.6473687E 03	108.578	21.716	0.160868	5	8.333
0.2876321E 04	0.5312051E 03	0.2924962E 04	10.464	1.744	0.726837	6	10.000
0.5955854E 03	0.5889534E 02	0.5984541E 03	5.647	0.807	0.148723	7	11.667
-0.6329089E 02	-0.3086777E 03	0.3150994E 03	258.413	32.302	0.078300	8	13.333
-0.3214866E 03	-0.1977910E 04	0.2003865E 04	260.769	28.974	0.497950	9	15.000
0.3901340E 02	0.2011533E 03	0.2049017E 03	79.024	7.902	0.050917	10	16.667

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 37 FLT 14.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.462323E 04

ZERO POSITION USED 8.27 LOAD/IN USED -30400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.4998754E 04							
-0.1308313E 04	0.9177595E 03	0.1598112E 04	144.951	144.951	0.587692	1	1.667
-0.2219022E 04	0.1571798E 04	0.2719303E 04	144.689	72.344	1.000000	2	3.333
0.7590925E 03	0.9196318E 03	0.1192453E 04	50.463	16.821	0.438514	3	5.000
-0.5541058E 02	0.3467334E 03	0.3511328E 03	99.080	24.770	0.129126	4	6.667
-0.1251418E 03	0.1749526E 03	0.2151101E 03	125.574	25.115	0.079105	5	8.333
-0.1893736E 03	-0.5598918E 02	0.1971892E 03	196.495	32.749	0.072515	6	10.000
-0.2229613E 03	-0.2383566E 03	0.3263826E 03	226.911	32.416	0.120024	7	11.667
0.1593934E 03	-0.3995616E 02	0.1643252E 03	345.927	43.241	0.060429	8	13.333
0.4025723E 03	-0.3502202E 03	0.6043953E 03	324.587	36.065	0.222257	9	15.000
-0.4552517E 01	-0.1607917E 03	0.1608561E 03	268.378	26.838	0.059153	10	16.667

Table III. (Continued)

TEST 14 N = 6 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 37 FLT 14.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.158101E 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1610236E 04							
0.1213653E 03	-0.5689219E 03	0.5817229E 03	282.042	282.042	0.602542	1	1.667
0.1185307E 02	0.9653750E 03	0.9654478E 03	89.297	44.648	1.000000	2	3.333
0.3664893E 03	0.4345225E 03	0.5684402E 03	49.955	16.618	0.588784	3	5.000
-0.1672034E 03	0.1309534E 03	0.2123812E 03	141.932	35.483	0.219982	4	6.667
0.1533185E 03	0.3596103E 01	0.1533606E 03	1.344	0.269	0.158849	5	8.333
0.5112523E 02	0.3364258E 02	0.6120140E 02	33.347	5.558	0.063392	6	10.000
0.2037710E 03	0.4727985E 02	0.2091842E 03	13.063	1.866	0.216671	7	11.667
0.1455568E 02	0.6682269E 02	0.6838960E 02	77.711	9.714	0.070837	8	13.333
-0.2566541E 03	0.3434351E 03	0.4287851E 03	126.767	14.085	0.444135	9	15.000
0.5066058E 02	-0.1213372E 00	0.5066072E 02	359.862	35.986	0.052474	10	16.667

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 37 FLT 14.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.535537E 04

ZERO POSITION USED 3.11 LOAD/IN USED -20300.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.3384075E 04							
0.6335193E 03	0.6194336E 02	0.6365403E 03	5.584	5.584	0.188771	1	1.667
-0.6767556E 03	-0.4988892E 03	0.8407666E 03	216.397	108.198	0.249336	2	3.333
0.3524231E 03	0.2975144E 03	0.4612124E 03	40.171	13.390	0.136776	3	5.000
-0.3352524E 04	-0.3621240E 03	0.3372025E 04	186.165	46.541	1.000000	4	6.667
-0.7417249E 03	0.6295181E 03	0.9728560E 03	139.678	27.936	0.288508	5	8.333
0.1487115E 03	0.1172261E 03	0.1893596E 03	38.248	6.375	0.056156	6	10.000
0.1382930E 03	0.5611667E 01	0.1384068E 03	2.324	0.332	0.041046	7	11.667
0.1228218E 03	0.1911205E 01	0.1228367E 03	0.891	0.111	0.036428	8	13.333
-0.2932961E 03	0.1033516E 03	0.3099888E 03	161.112	17.901	0.091930	9	15.000
-0.1110798E 03	-0.6939301E 02	0.1309737E 03	211.994	21.199	0.038841	10	16.667

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 37 FLT 14.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.284078E 04

ZERO POSITION USED 1.15 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.6436653E 02							
0.3258926E 03	0.1025138E 03	0.3416357E 03	17.462	17.462	0.171858	1	1.667
-0.2548511E 03	-0.3275762E 03	0.4150364E 03	232.117	116.059	0.208781	2	3.333
0.2203390E 03	0.1665502E 03	0.2762031E 03	37.085	12.362	0.138942	3	5.000
-0.1986890E 04	-0.6963438E 02	0.1987900E 04	182.007	45.502	1.000000	4	6.667
-0.3881326E 03	0.5156748E 03	0.6454204E 03	126.968	25.394	0.324674	5	8.333
0.1272105E 03	0.1072796E 03	0.1664074E 03	40.142	6.690	0.083710	6	10.000
-0.3537712E 02	0.7199232E 00	0.3538445E 02	178.834	25.548	0.017800	7	11.667
0.1575431E 03	0.8337512E 01	0.1577635E 03	3.029	0.379	0.079362	8	13.333
-0.5151173E 02	0.3161804E 02	0.6044138E 02	148.458	16.495	0.030405	9	15.000
-0.1388564E 03	-0.5308788E 02	0.1486588E 03	200.923	20.092	0.074782	10	16.667

Table III. (Continued)

TEST 14 N = 7

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 38 FLT 14.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.112253E 05

ZERO POSITION USED 9.51 LOAD/IN USED -26400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.6471895E 04							
-0.2455984E 04	-0.5540129E 03	0.2517695E 04	192.712	192.712	0.338221	1	1.709
-0.2366569E 04	0.7057734E 04	0.7443941E 04	108.537	54.269	1.000000	2	3.419
0.1053483E 04	0.1636200E 04	0.1946016E 04	57.224	19.075	0.261423	3	5.128
-0.7078146E 02	0.8849365E 03	0.8877627E 03	94.573	23.643	0.119260	4	6.838
-0.1203536E 03	0.4794651E 03	0.4943396E 03	104.091	20.818	0.066408	5	8.547
-0.2952505E 03	0.4519780E 02	0.2986899E 03	171.297	28.549	0.040125	6	10.256
-0.1387838E 03	-0.2824832E 03	0.3147341E 03	243.835	34.834	0.042281	7	11.966
0.9671939E 02	-0.2006264E 03	0.2227231E 03	295.738	36.967	0.029920	8	13.675
0.1141635E 04	0.5360403E 03	0.1261218E 04	25.152	2.795	0.169429	9	15.385
-0.3101291E 02	-0.1632212E 03	0.1661414E 03	259.241	25.924	0.022319	10	17.094

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 38 FLT 14.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.122989E 05

ZERO POSITION USED 3.75 LOAD/IN USED 25900.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.6947514E 04							
-0.2036904E 04	-0.1932486E 04	0.2842395E 04	224.224	224.224	0.323597	1	1.709
-0.1335893E 04	0.8681570E 04	0.8793750E 04	98.748	49.374	1.000000	2	3.419
0.1091639E 04	0.1657482E 04	0.1934672E 04	56.631	18.877	0.225948	3	5.128
-0.1449178E 03	0.5897517E 03	0.6072559E 03	103.806	25.951	0.069139	4	6.838
-0.6351160E 02	0.2135125E 03	0.2227584E 03	106.566	21.313	0.025360	5	8.547
-0.2318048E 03	0.7223549E 02	0.2428000E 03	162.691	27.115	0.027642	6	10.256
-0.1529052E 03	-0.2077509E 03	0.2579541E 03	233.647	33.378	0.029367	7	11.966
0.8239508E 02	-0.3303892E 03	0.3405093E 03	284.004	35.500	0.038766	8	13.675
0.1141284E 04	0.5074185E 02	0.1142411E 04	2.546	0.283	0.130060	9	15.385
0.1459820E 02	-0.2303505E 03	0.2308126E 03	273.626	27.363	0.026277	10	17.094

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 38 FLT 14.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.125487E 05

ZERO POSITION USED 8.27 LOAD/IN USED -30400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.6719141E 04							
-0.1638544E 04	-0.2214628E 04	0.2754688E 04	233.503	233.503	0.301081	1	1.709
-0.4552059E 04	0.7937301E 04	0.9149973E 04	119.834	59.917	1.000000	2	3.419
0.6465764E 03	0.1617934E 04	0.1742346E 04	68.217	22.739	0.190421	3	5.128
-0.4689670E 02	0.4637285E 03	0.4660536E 03	95.775	23.944	0.050939	4	6.838
-0.1702112E 03	0.1572923E 03	0.2317600E 03	137.259	27.452	0.025329	5	8.547
-0.3868135E 03	0.8952126E 02	0.3970374E 03	166.969	27.828	0.043392	6	10.256
-0.1349627E 03	-0.4129685E 03	0.4334662E 03	251.902	35.986	0.047482	7	11.966
0.6737000E 02	-0.2038768E 03	0.2147195E 03	288.286	36.036	0.023467	8	13.675
0.8725085E 03	0.7190281E 03	0.1130607E 04	39.492	4.388	0.123564	9	15.385
0.6621419E 01	-0.2057003E 03	0.2058068E 03	271.844	27.184	0.022493	10	17.094

Table III. (Continued)

TEST 14 M = 7 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 38 FLT 14.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.419406E 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2008151E 04							
-0.9670315E 01	-0.1430197E 04	0.1430229E 04	269.613	269.613	0.453811	1	1.709
-0.1510007E 03	0.3147979E 04	0.3151598E 04	92.746	46.373	1.000000	2	3.419
0.4705474E 03	0.6172126E 03	0.7761226E 03	52.679	17.560	0.246263	3	5.128
-0.9976329E 02	0.2545104E 03	0.2733647E 03	111.404	27.851	0.086738	4	6.838
0.1559283E 03	-0.1901237E 01	0.1559398E 03	359.301	71.860	0.049480	5	8.547
0.1344795E 03	0.7345398E 02	0.1532326E 03	28.644	4.774	0.048621	6	10.256
0.2446849E 03	0.3600972E 03	0.4353625E 03	55.804	7.972	0.138140	7	11.966
-0.1123318E 01	0.2168237E 03	0.2168266E 03	90.297	11.287	0.069799	8	13.675
-0.7085837E 03	0.1677180E 03	0.7281621E 03	166.683	18.520	0.231045	9	15.385
-0.4994682E 01	0.1215388E 03	0.1216414E 03	92.353	9.235	0.038597	10	17.094

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 38 FLT 14.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.862061E 04

ZERO POSITION USED 3.11 LOAD/IN USED -20300.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.3572732E 04							
0.7630508E 03	-0.8451931E 01	0.7831365E 03	359.382	359.382	0.144251	1	1.709
-0.2692382E 04	-0.1373896E 04	0.3022666E 04	207.035	103.517	0.556763	2	3.419
-0.7515250E 02	-0.2735508E 03	0.2836863E 03	254.638	84.879	0.052254	3	5.128
-0.2884910E 04	0.4599063E 04	0.5429000E 04	122.099	30.525	1.000000	4	6.838
-0.1133086E 04	0.1025035E 04	0.1527933E 04	137.866	27.573	0.281439	5	8.547
-0.5277C63E 02	-0.3331415E 02	0.6240651E 02	212.264	35.377	0.011495	6	10.256
0.1923113E 03	0.1122504E C3	0.2226943E 03	30.281	4.326	0.041019	7	11.966
0.1395999E 02	0.5278818E C2	0.5460286E 02	75.187	9.398	0.010058	8	13.675
-0.2608281E 03	0.3981264E 02	0.2638489E 03	171.321	19.036	0.048600	9	15.385
-0.3870842E 02	0.1141179E C3	0.1205041E 03	108.737	10.874	0.022196	10	17.094

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 38 FLT 14.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.535475E 04

ZERO POSITION USED 1.15 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.1917920E 03							
0.4327388E 03	0.1696665E 03	0.4648113E 03	21.409	21.409	0.142407	1	1.709
-0.1412314E 04	-0.9308350E C3	0.1691474E 04	213.388	106.694	0.518229	2	3.419
-0.1473583E 02	-0.1391184E C3	0.1398966E 03	263.953	87.984	0.042861	3	5.128
-0.1583693E 04	0.2853998E 04	0.3263953E 04	119.026	29.757	1.000000	4	6.838
-0.6981704E 03	0.6960056E 03	0.9787759E 03	134.676	26.935	0.299874	5	8.547
0.1767041E 02	-0.1786037E 02	0.2512440E 02	314.694	52.449	0.007698	6	10.256
0.1751022E 03	0.1573275E C2	0.1758076E 03	5.134	0.733	0.053863	7	11.966
0.1092048E 03	0.3461772E C2	0.1145603E 03	17.589	2.199	0.035099	8	13.675
-0.4825926E 02	0.9614557E C1	0.4970770E 02	168.733	18.748	0.015076	9	15.385
-0.9098625E 01	0.9254616E C2	0.9299231E 02	95.615	9.561	0.028491	10	17.094

Table III. (Continued)

TEST 14 N = 8

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 40 FLT 14.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.6960755 04

ZERO POSITION USED 9.51 LOAD/IN USED -26400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.4476105E 04							
-0.6386172E 03	0.2649996E 04	0.2725860E 04	103.549	103.549	0.601607	1	1.658
-0.4515465E 04	0.3744282E 03	0.4530961E 04	175.260	87.630	1.000000	2	3.317
0.3310410E 03	0.1114427E 04	0.1162555E 04	73.456	24.485	0.256580	3	4.975
-0.7605726E 03	0.4333760E 03	0.8753774E 03	150.325	37.581	0.193199	4	6.633
-0.2694450E 03	0.2723389E 03	0.3821064E 03	134.694	26.939	0.084553	5	8.292
-0.1639376E 03	-0.8732335E 02	0.1857442E 03	208.043	34.674	0.040994	6	9.950
-0.2584385E 03	-0.1896286E 03	0.3199548E 03	216.125	30.875	0.070615	7	11.609
0.4670149E 02	-0.1119301E 03	0.1212822E 03	292.648	36.581	0.026767	8	13.267
0.6988025E 03	-0.6319631E 03	0.9347866E 03	317.464	35.274	0.206311	9	14.925
-0.9738064E 01	-0.2998352E 03	0.2999932E 03	268.140	26.814	0.066210	10	16.584

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 40 FLT 14.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.6270025 04

ZERO POSITION USED 3.75 LOAD/IN USED 25900.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.5158773E 04							
0.5452734E 02	0.1207467E 04	0.1208697E 04	87.414	87.414	0.237798	1	1.658
-0.4653445E 04	0.2044757E 04	0.5082871E 04	156.279	78.139	1.000000	2	3.317
0.5565850E 03	0.1091372E 04	0.1224836E 04	62.973	20.991	0.240973	3	4.975
-0.5262666E 03	0.4016650E 03	0.6620356E 03	142.648	35.662	0.130248	4	6.633
-0.1232762E 03	0.2218322E 03	0.2536281E 03	119.056	23.811	0.049938	5	8.292
-0.1489348E 03	0.1176942E 03	0.1898249E 03	141.693	23.614	0.037346	6	9.950
-0.1710321E 03	-0.1094914E 03	0.2030772E 03	212.627	30.375	0.039953	7	11.609
0.8171440E 01	-0.7513910E 02	0.7558209E 02	276.207	34.526	0.014870	8	13.267
0.3800908E 03	-0.6156709E 03	0.7235466E 03	301.699	33.521	0.142350	9	14.925
0.5107454E 02	-0.3604421E 03	0.3640427E 03	278.065	27.806	0.071621	10	16.584

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 40 FLT 14.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.6982015 04

ZERO POSITION USED 8.27 LOAD/IN USED -30400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.4993570E 04							
0.3566234E 03	0.8475974E 03	0.9195679E 03	67.181	67.181	0.146002	1	1.658
-0.6205844E 04	0.1075427E 04	0.6298336E 04	170.169	85.084	1.000000	2	3.317
0.1264597E 03	0.1068087E 04	0.1075551E 04	83.246	27.749	0.170767	3	4.975
-0.4414446E 03	0.3785178E 03	0.5815059E 03	139.388	34.847	0.092327	4	6.633
-0.2244520E 03	0.2744126E 03	0.3545151E 03	129.281	25.856	0.056287	5	8.292
-0.1943774E 03	-0.4650803E 02	0.1998638E 03	193.456	32.243	0.031733	6	9.950
-0.1328891E 03	-0.1097317E 03	0.2219172E 03	209.635	29.948	0.035234	7	11.609
0.4781000E 02	-0.6609700E 02	0.8157576E 02	305.879	38.235	0.012952	8	13.267
0.6520217E 03	-0.4982974E 03	0.8206294E 03	322.612	35.846	0.130293	9	14.925
0.8755794E 02	-0.2531715E 03	0.2678848E 03	289.078	28.908	0.042533	10	16.584

Table III. (Continued)

TEST 14 N = 8 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 40 FLT 14.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.2547185 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1596437E 04							
0.4862307E 03	-0.5373762E 03	0.7247024E 03	312.139	312.139	0.454460	1	1.658
-0.1251699E 04	0.9876597E 03	0.1594646E 04	141.731	70.865	1.000000	2	3.317
0.2380497E 03	0.4685098E 03	0.5255178E 03	63.065	21.022	0.329551	3	4.975
-0.1951356E 03	0.2129135E 03	0.2888081E 03	132.505	33.126	0.181111	4	6.63
0.1525963E 03	-0.3977525E 02	0.1576950E 03	345.390	69.078	0.098890	5	8.292
0.1131649E 03	0.3504691E 02	0.1197120E 03	19.037	3.173	0.075071	6	9.950
0.2260449E 03	0.2210413E 02	0.2271231E 03	5.585	0.798	0.142429	7	11.609
-0.6361182E 02	-0.5771191E 02	0.8599020E 02	222.216	27.777	0.053862	8	13.267
-0.1744744E 03	0.4262598E 03	0.4605852E 03	112.260	12.473	0.288832	9	14.925
-0.3246368E 02	0.2206391E 03	0.2230146E 03	98.370	9.837	0.139852	10	16.584

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 40 FLT 14.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.136089E 05

ZERO POSITION USED 3.11 LOAD/IN USED -20300.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.3367803E 04							
0.7294592E 03	0.1641727E 03	0.7477053E 03	12.684	12.684	0.067057	1	1.658
-0.1916137E 03	-0.1645287E 04	0.1656407E 04	263.357	131.678	0.148554	2	3.317
0.1923788E 03	-0.1770977E 03	0.2614827E 03	317.368	105.789	0.023451	3	4.975
-0.1114961E 05	0.1172006E 03	0.1115022E 05	179.398	44.849	1.000000	4	6.633
-0.2353173E 03	0.1010107E 04	0.1037155E 04	103.114	20.623	0.093017	5	8.292
0.5414180E 03	0.2036428E 03	0.5784495E 03	20.613	3.435	0.051878	6	9.950
-0.1187644E 03	0.1917935E 03	0.2255675E 03	121.767	17.395	0.020232	7	11.609
0.3885579E 03	0.8206836E 02	0.3971301E 03	11.926	1.491	0.035616	8	13.267
-0.1243490E 03	0.5402885E 02	0.1355794E 03	156.515	17.391	0.012159	9	14.925
-0.2275373E 03	-0.7555338E 00	0.2275386E 03	180.190	18.019	0.020407	10	16.584

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 40 FLT 14.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.852235E 04

ZERO POSITION USED 1.15 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2152661E 03							
0.3689836E 03	0.1239806E 03	0.3892556E 03	18.573	18.573	0.057080	1	1.658
-0.2592090E 02	-0.1044565E 04	0.1044965E 04	268.414	134.207	0.153233	2	3.317
0.1380524E 03	-0.1960639E 03	0.2397906E 03	305.150	101.717	0.035163	3	4.975
-0.6796656E 04	0.5571245E 03	0.6819449E 04	175.314	43.828	1.000000	4	6.633
-0.1721940E 03	0.6798491E 03	0.7013171E 03	104.213	20.843	0.102841	5	8.292
0.3708279E 03	0.7484082E 02	0.3783047E 03	11.410	1.902	0.055474	6	9.950
-0.9362044E 02	0.1408161E 03	0.1690975E 03	123.618	17.660	0.024796	7	11.609
0.3286550E 03	0.3654619E 02	0.3306807E 03	6.345	0.793	0.048491	8	13.267
-0.8951344E 02	0.1586497E 03	0.1821603E 03	119.433	13.270	0.026712	9	14.925
-0.1576138E 03	0.6361121E 02	0.1699662E 03	158.022	15.802	0.024924	10	16.584

Table III. (Continued)

TEST 14 N = 9

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 41 FLT 14.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.671882E 04

ZERO POSITION USED 9.51 LOAD/IN USED -26400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.3385076E 04							
-0.1128864E 04	0.4363438E 04	0.4507094E 04	104.505	104.505	1.000000	1	1.664
-0.1755619E 04	-0.2443055E 04	0.3008616E 04	234.294	117.147	0.667529	2	3.328
0.4433311E 03	0.5201233E 03	0.6834255E 03	49.557	16.519	0.151633	3	4.992
-0.1983750E 03	0.1460176E 03	0.2467233E 03	143.713	35.928	0.054741	4	6.656
-0.1074161E 03	0.2335375E 03	0.2571401E 03	114.741	22.948	0.057052	5	8.319
-0.2570471E 03	-0.2412415E 02	0.2581765E 03	185.362	30.894	0.057282	6	9.983
-0.2447643E 03	-0.1646052E 03	0.2949651E 03	213.921	30.560	0.065445	7	11.647
0.1693746E 03	-0.1748737E 03	0.2434513E 03	314.085	39.261	0.054015	8	13.311
0.4278677E 03	-0.1496060E 03	0.4532695E 03	340.727	37.859	0.100568	9	14.975
-0.1244603E 03	-0.9625304E 02	0.1574955E 03	217.673	21.767	0.034944	10	16.639

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 41 FLT 14.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.530541E 04

ZERO POSITION USED 3.75 LOAD/IN USED 25000.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.4301125E 04							
-0.5581358E 02	0.2139729E 04	0.2140457E 04	91.494	91.494	0.603898	1	1.664
-0.3443438E 04	-0.8399446E 03	0.3544399E 04	193.708	96.854	1.000000	2	3.328
0.6828523E 03	0.1030191E 04	0.1235953E 04	56.462	18.821	0.348706	3	4.992
-0.1397808E 03	0.2977517E 03	0.3289297E 03	115.148	28.787	0.092803	4	6.656
-0.9178681E 02	0.3792510E 03	0.3902007E 03	103.606	20.721	0.110089	5	8.319
-0.1063307E 03	0.7597873E 02	0.1306866E 03	144.452	24.075	0.036871	6	9.983
-0.1596461E 03	-0.2835959E 02	0.1621455E 03	190.073	27.153	0.045747	7	11.647
0.8757932E 02	-0.1217661E 03	0.1499903E 03	305.725	38.216	0.042318	8	13.311
0.4380266E 03	-0.1562893E 03	0.4650737E 03	340.363	37.818	0.131214	9	14.975
-0.9608224E 02	0.1575868E 02	0.9736598E 02	170.686	17.069	0.027470	10	16.639

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 41 FLT 14.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.627437E 04

ZERO POSITION USED 8.27 LOAD/IN USED -30400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.4006673E 04							
0.2708057E 03	0.2139932E 04	0.2156899E 04	82.787	82.787	0.433869	1	1.664
-0.4485516E 04	-0.2143399E 04	0.4971316E 04	205.541	102.770	1.000000	2	3.328
0.1137003E 03	0.1152674E 04	0.1158267E 04	84.366	28.122	0.232990	3	4.992
-0.1452590E 03	0.2029920E 03	0.2496115E 03	125.587	31.397	0.050210	4	6.656
-0.2174984E 03	0.3645398E 03	0.4244934E 03	120.822	24.164	0.085388	5	8.319
-0.1493845E 03	0.7429796E 02	0.1668410E 03	153.556	25.593	0.033561	6	9.983
-0.2051276E 03	-0.5681348E 02	0.2128499E 03	195.481	27.926	0.042816	7	11.647
0.4104166E 01	-0.1205738E 03	0.1206436E 03	271.949	33.994	0.024268	8	13.311
0.4330500E 03	0.1095933E 03	0.4467024E 03	14.202	1.578	0.089856	9	14.975
0.4784331E 02	-0.7562466E 02	0.8948782E 02	302.319	30.232	0.018001	10	16.639

Table III. (Continued)

TEST 14 M = 9 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 41 FLT 14.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.173472E 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.14396746 04							
0.52539506 03	-0.35977426 03	0.6367766E 03	325.597	325.597	0.732963	1	1.664
-0.86334386 03	0.96946356 02	0.8687700E 03	173.593	86.796	1.000000	2	3.328
0.26392196 03	0.45314756 03	0.5244019E 03	59.783	19.928	0.603614	3	4.992
-0.14955006 03	0.19436106 03	0.2452374E 03	127.576	31.894	0.282281	4	6.656
0.12947156 03	0.11860626 02	0.1300136E 03	5.234	1.047	0.149652	5	8.319
0.90371696 02	0.67153816 02	0.1125907E 03	36.615	6.103	0.129598	6	9.983
0.16025036 03	0.12324736 03	0.2021879E 03	37.573	5.366	0.232729	7	11.647
0.44013736 02	0.16644806 03	0.1726911E 03	74.547	9.318	0.198776	8	13.311
-0.23756616 03	0.24229096 03	0.3393267E 03	134.436	14.937	0.390583	9	14.975
0.13133996 03	0.49483896 02	0.1127760E 03	26.026	2.603	0.129811	10	16.639

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 41 FLT 14.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.667846E 04

ZERO POSITION USED 3.11 LOAD/IN USED -20300.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.32232906 04							
0.75785896 03	0.23149206 03	0.7924258E 03	16.986	16.986	0.206212	1	1.664
0.42817946 03	-0.12376426 04	0.1309616E 04	289.084	144.542	0.340800	2	3.328
0.37358906 02	0.12958366 03	0.1348615E 03	73.918	24.639	0.035095	3	4.992
-0.12044266 04	-0.36491496 04	0.3842776E 04	251.734	62.934	1.000000	4	6.656
-0.81987236 03	0.46516166 03	0.1191943E 04	133.460	26.692	0.310178	5	8.319
-0.12622086 03	0.15491696 03	0.1998272E 03	129.172	21.529	0.052001	6	9.983
-0.62527396 02	0.27062966 03	0.2777588E 03	103.010	14.716	0.072281	7	11.647
0.11334126 03	0.12307376 03	0.1673122E 03	47.357	5.920	0.043539	8	13.311
-0.95770456 02	0.77747886 02	0.1233560E 03	140.930	15.659	0.032101	9	14.975
-0.57151156 01	0.12705076 03	0.1271791E 03	92.576	9.258	0.033096	10	16.639

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 41 FLT 14.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.414804E 04

ZERO POSITION USED 1.15 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.47830496 02							
0.33165606 03	0.21571716 03	0.3956382E 03	33.041	33.041	0.175512	1	1.664
0.39307476 03	-0.75576076 03	0.6472930E 03	296.879	148.440	0.375873	2	3.328
0.85317526 01	0.38336356 02	0.3927425E 02	77.453	25.818	0.017423	3	4.992
-0.73486606 03	-0.21310546 04	0.2254200E 04	250.974	62.743	1.000000	4	6.656
-0.49746756 03	0.59191416 03	0.7731987E 03	130.045	26.009	0.343004	5	8.319
-0.13598776 03	0.92295846 02	0.1405415E 03	138.950	23.158	0.062347	6	9.983
-0.73645136 02	0.12874116 03	0.1483168E 03	119.771	17.110	0.065796	7	11.647
0.16393246 03	-0.25359116 02	0.1658814E 03	351.208	43.901	0.073588	8	13.311
-0.29203756 02	0.57207846 02	0.6423079E 02	117.044	13.005	0.028494	9	14.975
0.60306526 02	0.11119206 03	0.1264932E 03	61.526	6.153	0.056114	10	16.639

Table III. (Continued)

TEST 14 N = 10

HARMONIC ANALYSIS MODEL CL67C5 SHIP 33 T 010 CTR 42 FLT 14.0 TR 1 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.166741E 05

ZERO POSITION USED 5.51 LOAD/IN USED -26400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.85246?8E 03							
-0.3C3?4?3E 04	0.5027828E 04	0.5523940E 04	108.573	108.573	1.000000	1	1.672
0.47085?1E 04	-0.5C243C5E 04	0.5303750E 04	300.404	150.202	0.960651	2	3.344
0.1435?7C?E 04	-0.?7645?4E 03	0.1739?73E 04	325.835	108.612	0.314971	3	5.017
0.2826?80E 03	0.63C8E?4E 03	0.6914421E 03	65.843	16.461	0.125001	4	6.689
-0.8285?81E 02	0.2487?66E 03	0.2622302E 03	108.419	21.684	0.047534	5	8.361
-0.1066?1C?E 03	-0.58?7347E 02	0.1217864E 03	206.903	34.818	0.021788	6	10.033
-0.2265?47E 02	-0.2304?5CE 03	0.2315963E 03	264.385	37.769	0.041916	7	11.706
0.6541629E 02	0.5323788E 02	0.6748077E 02	37.486	4.684	0.005185	8	13.378
0.4522246E 03	-0.3853215E 03	0.5948826E 03	319.629	35.514	0.062462	9	15.050
-0.3010173E 03	-0.6172281E 02	0.3072800E 03	191.588	19.159	0.032264	10	16.722

HARMONIC ANALYSIS MODEL CL67C5 SHIP 33 T 010 CTR 42 FLT 14.0 TR 11 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.136654E 05

ZERO POSITION USED 3.75 LOAD/IN USED 25900.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.163488?E 04							
-0.1961672E 04	0.7439E48E 04	0.7694121E 04	104.771	104.771	0.981567	1	1.672
0.2812646E 04	-0.7316613E 04	0.7838609E 04	291.028	145.514	1.000000	2	3.344
0.8995?80E 03	-0.5784C43E 03	0.1329306E 04	312.608	104.203	0.169591	3	5.017
0.1322718E 03	0.1494210E 03	0.1995631E 03	48.486	12.121	0.025459	4	6.689
-0.857?843E 02	0.179?85?E 03	0.1987495E 03	115.565	23.114	0.025355	5	8.361
-0.601?262E 02	-0.972395?E 02	0.1143571E 03	238.246	39.708	0.014565	6	10.033
-0.6663679E 02	-0.1038?64E 03	0.1234242E 03	237.322	33.903	0.015746	7	11.706
-0.5851545E 02	-0.2103532E 03	0.2183977E 03	254.440	31.805	0.027662	8	13.378
0.4413328E 03	-0.2355715E 03	0.5002815E 03	331.857	36.873	0.063023	9	15.050
-0.1825711E 03	-0.3252666E 02	0.1858398E 03	190.080	19.008	0.023708	10	16.722

HARMONIC ANALYSIS MODEL CL67C5 SHIP 33 T 010 CTR 42 FLT 14.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.127646E 05

ZERO POSITION USED 8.27 LOAD/IN USED -30400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1104744E 04							
-0.1863?48E 04	0.7135723E 04	0.7376023E 04	104.665	104.665	1.000000	1	1.672
0.3144457E 04	-0.6180141E 04	0.6934098E 04	296.967	148.484	0.940088	2	3.344
0.8403597E 03	-0.7648154E 03	0.1136316E 04	317.696	105.899	0.154055	3	5.017
0.2614?14E 03	0.3743525E 03	0.4565898E 03	55.074	13.768	0.061902	4	6.689
-0.1404142E 03	0.1926613E 03	0.2303939E 03	127.550	25.510	0.031236	5	8.361
-0.1850?36E 03	-0.9343179E 02	0.1926130E 03	196.105	32.684	0.026113	6	10.033
-0.1C232C4E 03	-0.1960652E 03	0.2211e20E 03	242.442	34.635	0.029984	7	11.706
0.7504550E 02	-0.2136705E 03	0.2264662E 03	289.352	36.165	0.030703	8	13.378
0.8742F81E 03	-0.3163289E 03	0.9297546E 03	340.109	37.790	0.126051	9	15.050
-0.1262124E 03	-0.2539236E 03	0.2835608E 03	243.570	24.357	0.038444	10	16.722

Table III. (Continued)

TEST 14 N = 10 (CONTINUED)

HARMONIC ANALYSIS MODEL CL87C5 SHIP 33 T 010 CTR 42 FLT 14.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.283264E C4

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.737C500E C3							
C.6446621E 02	C.697C264E 03	C.8993413E 03	85.988	85.988	C.412692	1	1.672
C.1C07654E C4	-0.1932244E C4	0.2179206E 04	297.542	148.771	1.CCCCCC	2	3.344
0.3C46619E 03	-C.3876660E 03	0.4930554E 03	308.163	102.721	C.226255	3	5.017
C.3492155E C2	C.1009C3CE 03	C.1067751E 03	70.910	17.727	C.C48997	4	6.689
C.1708416E C3	C.6242247E C2	C.1319884E C3	20.C71	4.014	C.CE2465	5	8.361
0.1737243E C3	0.6994748E 02	0.1872773E 03	21.931	3.655	C.CE5538	6	10.033
0.1237334E C3	C.1549746E 03	C.1792320E 03	51.378	7.340	C.CSC965	7	11.706
0.773244PE C2	C.125C793E 03	C.1470507E 03	58.275	7.284	C.CE7479	8	13.378
-0.2511812E 03	C.1815593E 03	0.3099287E 03	144.140	16.016	0.142221	9	15.050
0.6486143E C2	0.3476376E 02	C.7359021E 02	28.190	2.819	C.C33169	10	16.722

HARMONIC ANALYSIS MODEL CL87C5 SHIP 33 T C10 CTR 42 FLT 14.0 TR 24 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = C.617443E C4

ZERO POSITION USED 3.11 LOAD/IN USED -20300.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
C.3CCC3S0E C4							
0.1C458C5E C4	-0.1592534E 03	C.1061814E 04	351.374	351.374	C.328111	1	1.672
0.2403713E C4	C.11C76C1E 04	C.2646649E 04	24.741	12.370	C.817841	2	3.344
-0.2518352E C3	-0.1746454E 03	C.3927964E 03	206.395	68.800	C.121378	3	5.017
C.1308877E C2	0.3236116E 04	C.3236143E 04	89.768	22.442	1.CCCCCC	4	6.689
-0.2144C78E C3	C.7632183E 03	C.7927627E C3	105.691	21.138	C.244971	5	8.361
0.1825506E C3	-C.17C2644E 03	0.2496291E 03	316.994	52.832	C.C77138	6	10.033
-0.2791C50E C3	-0.2324167E 02	C.2800C79E 03	184.760	26.394	C.CE6545	7	11.706
-0.9635783E C2	0.1417C65E 02	C.9743379E 02	171.637	21.455	C.C3C1C8	8	13.378
-0.1035768E C3	0.1279553E 02	C.1047616E 03	172.982	19.220	C.C32372	9	15.050
0.4531268E C2	0.2322249E 03	C.2366044E 03	78.959	7.896	C.C72113	10	16.722

HARMONIC ANALYSIS MODEL CL87C5 SHIP 33 T 010 CTR 42 FLT 14.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.375609E C4

ZERO POSITION USED 1.15 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2397910E C3							
0.4172292E C3	-0.9962634E 02	C.4287275E 03	346.700	346.700	0.222280	1	1.672
0.1347780E C4	0.6190693E 03	C.1482741E 04	24.635	12.318	C.172205	2	3.344
-0.1715560E C3	-C.5841510F 02	0.1977839E 03	209.842	69.947	C.1C2005	3	5.017
0.1364816E C3	C.1915272E 04	C.1920129E 04	85.924	21.481	1.CCOCCC	4	6.689
-0.1771923E C3	0.4938159E 03	C.5152461E 03	110.115	22.023	C.2EE335	5	8.361
0.1C1335PE C3	-0.1356EE5E 03	C.1725606E 03	305.961	50.994	C.CE5EE5	6	10.033
-0.2C57CPCE C3	-0.6755759E 02	C.2165176E 03	198.181	28.312	C.112762	7	11.706
-0.66EP4277E C2	0.6450C93E 01	C.6715321E 02	174.488	21.811	0.034973	8	13.378
-0.1602411E C3	C.6123572E 02	C.1715436E 03	159.C86	17.676	0.CE9339	9	15.050
-0.9502782E C2	0.2714CC4E 03	C.2769226E 03	101.462	10.146	C.144221	10	16.722

Table III. (Continued)

TEST 15 N = 1

HARMONIC ANALYSIS MODEL CLE7C5 SHIP 33 T 010 CTR 43 FLT 15.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = C.7E6592E C4

ZERO POSITION USED 9.51 LOAD/IN USED -26400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2596406E C4							
-0.1534744E C4	0.1426554E 04	C.2095377E 04	137.092	137.092	C.396504	1	1.214
0.1883637E C4	C.8304551E 03	C.2058578E 04	23.752	11.556	C.389541	2	2.427
0.5126559E C4	-0.1282P44E C4	C.5294625E 04	345.951	115.317	1.CCCCCC	3	3.641
0.6391982E C3	C.5365444E 03	C.8358254E 03	40.115	10.029	C.158162	4	4.854
0.1953105E C3	0.3798822CE 03	C.4262068E 03	62.725	12.545	C.080650	5	6.068
-0.1645676E C3	C.77C1515E 02	C.1E16599BF 03	154.920	25.820	C.034383	6	7.282
-0.76RC566E C2	0.1790CC3E C3	C.1947825E 03	113.223	16.175	C.036656	7	8.495
0.F672153E C1	0.1C17C56E 03	C.1020746E 03	85.126	10.641	C.019315	8	9.709
-0.3210394E C2	-0.1679742E 02	C.3623280E 02	207.619	23.069	C.CC6856	9	10.922
-0.3CR5347E 02	-0.2118C68E 02	C.3742403E 02	214.469	21.447	C.CC7C82	10	12.136

HARMONIC ANALYSIS MODEL CLE7C5 SHIP 33 T 010 CTR 43 FLT 15.0 TR 21 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = C.663174E C4

ZERO POSITION USED 3.75 LOAD/IN USED 25900.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.323E189E C4							
-0.1300938E C4	0.5342CE3E 03	C.1406349E 04	157.675	157.675	C.252988	1	1.214
0.2172259E C4	0.6782451E 03	C.2275681E 04	17.340	8.67C	C.473935	2	2.427
0.4515566E C4	-C.1632655E 04	C.4931668E 04	340.121	113.374	1.CCCCCC	3	3.641
0.3942417E C3	0.536917E7E 03	C.6661143E 03	53.711	13.428	C.139126	4	4.854
-0.4752986E C2	0.2629143E 03	C.3660107E 03	97.459	19.492	C.076226	5	6.068
-0.1371212E C3	C.114334CE 03	0.1765343E 03	140.178	23.363	C.037182	6	7.282
-0.1143CE3E C3	0.6298514E 02	C.1305144E 03	151.143	21.592	C.027181	7	8.495
-0.592CC52E C2	0.3954C51E 02	C.1C67504E 03	153.268	19.184	C.022240	8	9.709
-0.7C718S2E C2	-0.1820169E 01	C.7C74191E 02	181.474	20.164	C.014733	9	10.922
-0.1C22121E 02	-0.5537424E 02	C.5690144E 02	259.633	25.563	C.011830	10	12.136

HARMONIC ANALYSIS MODEL CLE7C5 SHIP 33 T 010 CTR 43 FLT 15.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = C.7E4246F C4

ZERO POSITION USED 8.27 LOAD/IN USED -30400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.3115C43E C4							
-0.5510264E C3	C.1FC87S3E 03	C.5799534E 03	161.827	161.827	C.115E52	1	1.214
0.1253116F C4	0.224138CE 04	C.2567890E 04	60.791	30.396	C.512566	2	2.427
0.4928223E C4	-C.8788420E 03	C.5DC5969E 04	349.889	116.630	1.COCCCC	3	3.641
0.3971743E C3	C.6C05E64E 03	C.7200190E 03	56.522	14.131	C.143832	4	4.854
0.6496056E C2	C.3359CCCE C3	C.3661401E 03	79.183	15.837	C.C65145	5	6.068
-0.854C219E C2	C.1830935E 03	C.2020316E 03	115.006	19.168	C.040358	6	7.282
-0.7295255E C2	0.8550113E 02	C.1124204E 03	130.488	18.641	C.022457	7	8.495
-0.4723953E C2	C.6119154E 02	C.7730414E 02	127.667	15.958	C.015442	8	9.709
-0.7C288C9E C2	-C.2C4566EE 02	C.7320447E 02	196.227	21.803	C.014623	9	10.922
-0.7228E57E C2	0.1238193E 01	C.7229915E 02	179.019	17.902	C.014443	10	12.136

Table III. (Continued)

TEST 15 N = 1 (CONTINUED)

HARMONIC ANALYSIS MODEL CLE7C5 SHIP 33 T 010 CTR 43 FLT 15.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.28546CE C4

ZERO POSITION USED 0.35 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1C971E0E C4							
0.5E07777E C2	-0.E338E91E 03	C.6363447E 03	275.056	275.056	C.3E6731	1	1.214
0.81817E9E 03	0.4425E28E 03	C.9302185E 03	28.411	14.206	C.5E5329	2	2.427
0.1524249E C4	-0.6158C47E 03	C.1645446E 04	337.872	112.624	1.CCCCCC	3	3.641
0.79818136 C2	C.3022C17E 03	C.3125647E 03	75.205	18.801	C.185957	4	4.854
0.5556041E C2	0.1149213E 03	C.1523323E 03	48.979	9.796	C.C92578	5	6.068
-0.6C2E223E C2	C.2051596E 02	C.6367772E C2	161.205	26.867	C.C38695	6	7.282
0.8342827E C2	C.7369975E C2	C.1113190E 03	41.457	5.922	C.C67653	7	8.495
0.1133853E C3	0.1E69436E 03	0.2186415E 03	58.762	7.345	C.132877	8	9.709
0.4449265E C1	C.1185E46E 03	C.1190478E 03	87.858	9.762	C.C72350	9	10.922
-0.5866CC3E C2	0.1565836E 03	C.2C7C663E 03	106.457	10.646	C.125842	10	12.136

HARMONIC ANALYSIS MODEL CLE7C5 SHIP 33 T 010 CTR 43 FLT 15.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = C.28562CE C4

ZERO POSITION USED 3.11 LOAD/IN USED -20300.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.1597565E C4							
0.5176140E C3	-0.7674506E 02	C.5826899E 03	352.432	352.432	C.544658	1	1.214
-0.65058C3E C3	-0.1445947E 03	C.6664551E 03	192.531	96.265	C.622956	2	2.427
-0.7286853E C3	C.117C626E 03	C.738C315E 03	170.872	56.957	C.689661	3	3.641
0.2428044E 03	-0.2174347E 02	C.2437760E 03	354.883	88.721	C.227665	4	4.854
0.2900725E C2	-0.1C69433E 04	0.1069826E 04	271.554	54.311	1.CCCCCC	5	6.068
-0.5191319E 02	0.2764395E 03	C.2913193E 03	108.391	18.065	C.272305	6	7.282
0.4615545E C2	0.725779CE 02	C.8603238E 02	57.523	8.218	C.CEC417	7	8.495
-0.3541333E C3	0.8360464E 02	0.3639682E 03	166.717	20.840	C.340119	8	9.709
0.6131619E C2	0.8621937E 01	0.6192079E 02	8.013	C.890	C.C57879	9	10.922
0.6526550E C1	0.1034128E 02	C.1946786E 02	70.412	7.041	0.C18197	10	12.136

HARMONIC ANALYSIS MODEL CLE7C5 SHIP 33 T C10 CTR 43 FLT 15.0 TR 28 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.1885468 C4

ZERO POSITION USED 1.15 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.7124425E 02							
0.2420847E C3	C.22C7294E 02	C.2430885E 03	5.210	5.210	C.39C62E	1	1.214
-0.2118198E 03	-0.1381568E 03	0.3410554E 03	203.896	101.948	C.548C68	2	2.427
-0.4745181E C3	C.1234506E 03	C.4903135E C3	165.417	55.139	C.787922	3	3.641
0.1092325E C3	-0.776716CE 02	C.2138375E 03	339.701	84.675	C.343632	4	4.854
-0.3255040E C2	-0.6214353E 03	0.6222871E 03	267.001	53.400	1.CCCCCC	5	6.068
-0.3632651E C2	0.1887E83E 03	C.1922515E 03	100.892	16.815	C.3C8543	6	7.282
0.1785855E C2	0.63832C3E 02	C.6629325E 02	74.369	10.624	C.1C6516	7	8.495
-0.2950559E C3	0.6525559E 02	0.3021897E 03	167.529	20.941	C.485611	8	9.709
0.3063092E C2	-0.2352786E 02	0.3862401E 02	322.472	35.830	C.C62C6E	9	10.922
0.5232221E C2	C.1684C35E 02	C.5591925E 02	17.527	1.753	C.C89E61	10	12.136

Table III. (Continued)

TEST 15 N = 2

HARMONIC ANALYSIS MODEL CL87C5 SHIP 33 T C10 CTR 44 FLT 15.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.77E358E C4

ZERO PCSITION USED 5.51 LCAD/IN USED -26430.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.181E8E4E C4							
-0.3C17E46E C4	0.29E81EEE 04	C.4246816E 04	135.281	135.281	1.CCCCCC	1	1.206
0.2171538E C4	-C.2C823S7E 04	C.3CC8647E C4	316.200	158.10C	C.708448	2	2.413
0.1795042E 04	-C.289C5E5E 04	0.3402319E 04	301.837	1CC.612	C.8C1287	3	3.619
0.2155C54E C3	C.1430S13E C3	C.25E6877E 03	33.5E4	E.396	C.C6C913	4	4.825
0.80656E36E C2	C.8062135E 02	C.1140405E C3	44.983	E.958	C.C2E853	5	6.031
-0.13227S1E C3	-0.1244371E 02	C.1323S61E 03	135.374	30.E56	C.C31284	6	7.238
0.1841146E C1	-0.2124538E C2	C.2132500E 02	274.953	3S.27S	C.CC5021	7	8.444
-0.5E734J4E C2	-C.6C7S9EC5 02	C.E4507J7E 02	225.971	28.246	C.C1SE5S	8	9.650
-0.2711516E C2	-0.1679271E 03	C.1701120E 03	260.828	28.981	C.C4CC5E	9	10.856
0.1C1E456E C3	-0.1018522E 03	C.1439231E 03	314.930	31.493	C.C338SC	10	12.063

HARMONIC ANALYSIS MODEL CL87C5 SHIP 33 T 010 CTR 44 FLT 15.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.667195E C4

ZERO PCSITION USED 3.75 LCAD/IN USED 25900.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2126827E C4							
-0.2626539E C4	0.235275CE 04	C.3527697E 04	138.169	138.169	1.CCCCCC	1	1.206
0.1688127E C4	-0.1893548E 04	C.2537087E 04	311.711	155.856	C.719191	2	2.413
0.1818257E C4	-0.2353EE4E 04	C.2974361E 04	307.684	102.561	C.E43145	3	3.619
0.5E79EE7E C2	0.3C595E5E 03	C.3115571E 03	79.122	19.780	C.CEP317	4	4.825
-0.82816C2E C2	0.1340161CE 03	C.1575415E 03	121.714	24.343	C.CC4465E	5	6.031
-0.715S76CF 02	0.76F8713E 01	C.7200922E 02	174.871	28.578	C.C20413	6	7.238
-0.S728E68E C2	-0.5115E57E 02	C.1C491E5E 03	207.736	29.677	C.C31155	7	8.444
-0.1192535E C2	-0.5899E15E 02	C.6019133E 02	258.573	32.322	C.C17C63	8	9.650
-0.2C676J5E C2	-0.2071833E 03	C.2082124E 03	264.301	29.367	C.C55C22	9	10.856
0.1120935E C3	-0.17902E6E 03	C.2112255E 03	302.052	30.205	C.C55E7E	10	12.063

HARMONIC ANALYSIS MODEL CL87C5 SHIP 33 T C10 CTR 44 FLT 15.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.632154E C4

ZERO PCSITICN USED 8.27 LCAD/IN USED -30400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.201C472E C4							
-0.2094C64E C4	0.1832753E 04	C.2782820E 04	138.807	138.807	C.812812	1	1.206
0.1738D73E C4	-C.3874231E 03	C.1780728E 04	347.434	173.717	C.52C115	2	2.413
0.27841E9E C4	-C.1952482E 04	C.3423656E 04	324.411	108.137	1.CCCCCC	3	3.619
0.21066C7E C3	C.3C775ICE 03	C.3725788E 03	55.611	13.903	C.1C894C	4	4.825
-0.3927629E C2	0.2374128E 03	C.2404785E 03	99.159	19.832	C.C7C239	5	6.031
-0.1493200E C3	0.6C87271E 02	C.1612512E 03	157.821	26.303	C.C47C95	6	7.238
-0.6651357E C2	-0.3549J3CE 02	C.7574431E 02	207.943	29.706	C.C22124	7	8.444
-0.1CA8920E C3	-0.5611334F 02	C.1224957E 03	207.263	25.908	0.C3578C	8	9.650
-0.4332443E C2	-0.1317EC4E 03	C.1397195E 03	251.801	27.978	C.C40517	9	10.856
0.9436284E C2	-0.1383644E 03	C.1674787E 03	304.293	30.429	C.C48517	10	12.063

Table III. (Continued)

TEST 12 N = 2 (CONTINUED)

HARMONIC ANALYSIS MODEL CLE7C5 SHIP 33 T 010 CTR 44 FLT 15.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = C.1P6647E C4

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-C.910695C9E C3							
-0.2659954E C3	-0.186247HF 03	C.2243955F 03	215.041	215.041	C.325559C	1	1.206
0.7316528E C3	-C.3232751E 03	C.7998992E C3	336.162	166.C81	C.3BC2E5E	2	2.413
0.5223162E C3	-C.F4941195E 03	C.9963015E 03	301.618	1CC.53C	1.CCCCCC	3	3.619
-0.46P02P6E C2	0.1985354E 03	C.2046366E 03	104.082	26.C21	C.2C5446	4	4.825
0.1PP15E1E C2	C.1C111144F 02	C.2136397E 02	28.249	5.650	C.C21443	5	6.031
-0.1955952E C2	-C.1805E55E 02	C.2684122E C2	222.277	37.C46	C.C26941	6	7.238
0.7025022E C2	-C.16C7715E 02	C.7206649E 02	347.109	49.587	C.C72334	7	8.444
C.9945740E C2	C.15892E4E 03	C.1874817E 03	57.961	7.245	C.1EE178	8	9.650
0.3837726E C2	0.954CE63E 02	C.1C28378E 03	68.088	7.565	C.1C322C	9	1C.856
-0.1C37741E 03	0.26217C2E 03	0.2819614E 03	111.59	11.160	C.283C08	10	12.063

HARMONIC ANALYSIS MODEL CLE7C5 SHIP 33 T 010 CTR 44 FLT 15.0 TR 24 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.27C915E C4

ZERO POSITION USED 3.11 LOAD/IN USED -20300.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.1795475E C4							
0.6319SC4E C3	-0.1587555E 03	C.6624822E 03	342.537	342.537	C.410945	1	1.206
-0.3107655E C3	0.1607554E 03	C.3498875E 03	152.648	76.324	C.217C39	2	2.413
-0.4158560F C3	C.3363242E 03	C.5348364E 03	141.036	47.012	C.331165	3	3.619
-0.4525542E C3	C.6160373E 01	C.4526360E 03	179.220	44.805	C.2E0715	4	4.825
0.2972205E C3	-0.1584456E 04	0.1612094E 04	280.624	56.125	1.CCCCCC	5	6.031
-0.5173572E C2	0.E3471594E 02	C.1285295E 03	139.501	23.250	0.C79126	6	7.238
0.9531042E C2	C.1021449E 03	C.1397056E 03	46.982	6.712	0.C86661	7	8.444
-0.5490193E 02	0.1461356E 03	0.1561084E C3	110.591	13.824	0.C96F3E	8	9.650
0.1255526E C3	-C.5102E38E 02	C.1350631E 03	337.802	37.534	C.CE37E1	9	1C.856
0.1906197E C3	C.1613E78E 03	C.2497636E 03	40.253	4.025	C.154931	10	12.063

HARMONIC ANALYSIS MODEL CLE7C5 SHIP 33 T 01C CTR 44 FLT 15.0 TR 3E 2 CHORD BEND STA 65
OVERALL CYCLIC LOAD = 0.1634C7E C4

ZERO POSITION USED 1.15 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1262194E C3							
0.3621401E C3	-0.7C93506E 01	C.3622095E 03	358.878	358.E78	C.295056	1	1.206
-0.1675E1CE C3	0.E455637E 02	C.1E76871E 03	153.223	76.612	C.1559E6	2	2.413
-0.2034512E C3	C.2950153E 03	C.3583696E 03	124.591	41.530	0.3EC574	3	3.619
-0.2359577E C3	C.17C0260F 01	C.2359638E 03	179.587	44.897	C.2E0848	4	4.825
0.1C537E2E C3	-C.9347446E 03	C.S40665EE 03	276.432	55.286	1.CCCCCC	5	6.031
-0.1992928E C2	C.2882336E 02	C.3504228E 02	124.661	20.777	C.C37253	6	7.238
0.8465AC4E C2	0.9340463E 02	C.1CCC951E 03	32.245	4.606	0.1CE4C9	7	8.444
-0.5438582E C2	C.7C527C1E 02	C.8906351E C2	127.639	15.955	C.C94681	8	9.650
0.6241173E C2	-C.6253113E 02	C.8805722E 02	315.400	35.044	C.C94675	9	1C.856
0.1394191E C3	C.4785156E 02	0.1474023E 03	18.943	1.894	C.1567CC	10	12.063

Table III. (Continued)

TEST 15 N = 3

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 45 FLT 15.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.954563E 04

ZERO POSITION USED 9.51 LOAD/IN USED -26400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1201853E 04							
-0.4305457E 04	0.3393680E 04	0.5482156E 04	141.754	141.754	0.919089	1	1.199
0.3282892E 04	-0.4980074E 04	0.5964773E 04	303.393	151.697	1.000000	2	2.398
0.6523647E 03	-0.1708237E 04	0.1828566E 04	290.932	96.957	0.306561	3	3.597
0.1366651E 03	0.6274592E 03	0.6425986E 03	77.538	19.385	0.107732	4	4.796
-0.2145827E 02	0.3820669E 03	0.3826689E 03	93.215	18.643	0.064155	5	5.995
-0.1780191E 03	0.9333350E 02	0.2010023E 03	152.332	25.389	0.033698	6	7.194
-0.1460904E 03	0.4307159E 02	0.1523074E 03	163.573	23.368	0.025534	7	8.393
-0.4452582E 02	0.2463007E 02	0.5088406E 02	151.050	18.881	0.008531	8	9.592
-0.1238931E 03	-0.5538844E 02	0.1357106E 03	234.038	22.576	0.022752	9	10.791
0.4562366E 02	-0.1044154E 03	0.1139478E 03	293.603	29.360	0.019103	10	11.990

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 45 FLT 15.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.807868E 04

ZERO POSITION USED 3.75 LOAD/IN USED 25900.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1520324E 04							
-0.3653889E 04	0.2636750E 04	0.4505922E 04	144.185	144.185	0.963626	1	1.199
0.1820734E 04	-0.4306969E 04	0.4676008E 04	292.916	146.458	1.000000	2	2.398
0.3125176E 03	-0.1807731E 04	0.1834545E 04	279.808	93.269	0.392332	3	3.597
0.2255117E 03	0.3087034E 03	0.3823000E 03	53.851	13.463	0.081758	4	4.796
-0.1204712E 03	0.2384253E 03	0.2671328E 03	116.807	23.351	0.057128	5	5.995
0.2609383E 02	0.4814282E 02	0.5475964E 02	61.542	10.257	0.011711	6	7.194
-0.1159710E 03	0.1006309E 02	0.1164068E 03	175.041	25.006	0.024894	7	8.393
-0.8591888E 02	-0.2259427E 02	0.8884003E 02	194.734	24.342	0.018999	8	9.592
-0.4311203E 02	0.2279933E 02	0.4876942E 02	152.128	16.903	0.010430	9	10.791
-0.3900171E 02	-0.1083972E 03	0.1152002E 03	250.211	25.021	0.024636	10	11.990

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 45 FLT 15.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.641590E 04

ZERO POSITION USED 8.27 LOAD/IN USED -30400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1603313E 04							
-0.3161457E 04	0.2277026E 04	0.3996107E 04	144.237	144.237	1.000000	1	1.199
0.1774985E 04	-0.2266510E 04	0.2878826E 04	308.056	154.033	0.738898	2	2.398
0.1564776E 04	-0.1693068E 04	0.2305428E 04	312.745	104.248	0.591726	3	3.597
0.2069929E 03	0.1935383E 03	0.2833782E 03	43.076	10.769	0.072734	4	4.796
-0.8795718E 02	0.2235741E 03	0.2402537E 03	111.475	22.295	0.061665	5	5.995
-0.1305783E 03	-0.3957137E 02	0.1364426E 03	196.859	32.810	0.035020	6	7.194
-0.3316194E 02	-0.5414508E 02	0.6349333E 02	238.514	34.073	0.016297	7	8.393
-0.7353342E 02	-0.8559543E 02	0.1159073E 03	230.623	28.828	0.029750	8	9.592
-0.9134521E 02	-0.1302347E 03	0.1590755E 03	234.955	26.136	0.040829	9	10.791
0.7341222E 02	-0.1449476E 03	0.1624782E 03	296.861	29.686	0.041703	10	11.990

Table III. (Continued)

TEST 15 N = 3 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 45 FLT 15.0 TR 41 2 FLAP BEND STA 116
OVERALL CYCLIC LOAD = 0.215193E 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.8344226E 03							
-0.5401936E 03	-0.1558886E 02	0.5404185E 03	181.653	181.653	0.449859	1	1.199
0.6804182E 03	-0.9900354E 03	0.1201307E 04	304.499	152.250	1.000000	2	2.398
-0.4524927E 02	-0.6282976E 03	0.6299248E 03	255.881	88.527	0.524366	3	3.597
0.1939091E 02	0.1792753E 03	0.1803209E 03	83.827	20.957	0.150104	4	4.796
-0.5869926E 01	0.3231027E 02	0.3283914E 02	100.297	20.059	0.027336	5	5.995
0.6158517E 02	-0.5817300E 02	0.8471619E 02	316.632	52.772	0.070520	6	7.194
0.1556824E 03	0.3391002E 02	0.1595280E 03	12.273	1.753	0.132795	7	8.393
0.6448306E 02	0.1731678E 03	0.1847841E 03	69.576	8.697	0.153819	8	9.592
-0.8378076E 02	0.6595300E 02	0.1091450E 03	140.140	15.571	0.090855	9	10.791
-0.5794254E 02	0.1359084E 03	0.1477445E 03	113.090	11.309	0.122986	10	11.990

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 45 FLT 15.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.211065E 04

ZERO POSITION USED 3.11 LOAD/IN USED -20300.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.1536130E 04							
0.7612361E 03	-0.1222498E 03	0.7709900E 03	350.876	350.876	1.000000	1	1.199
-0.1573638E 03	0.3741238E 03	0.4058718E 03	112.813	56.406	0.526429	2	2.398
-0.3170620E 03	0.2202964E 03	0.3860813E 03	145.208	48.403	0.500760	3	3.597
-0.5380344E 03	0.2453737E 03	0.5913452E 03	155.484	38.871	0.766995	4	4.796
0.2776548E 03	-0.7173833E 03	0.7692405E 03	291.158	58.232	0.997731	5	5.995
-0.6000026E 02	-0.7437652E 01	0.6045949E 02	197.066	31.178	0.078418	6	7.194
0.1862458E 03	0.2817660E 01	0.1862671E 03	0.867	0.124	0.241595	7	8.393
-0.3480403E 03	0.1802180E 02	0.3485063E 03	177.036	22.129	0.452024	8	9.592
0.2234852E 03	0.1318550E 03	0.2594829E 03	30.540	3.393	0.336558	9	10.791
0.1235919E 03	0.4189774E 02	0.1305005E 03	18.727	1.873	0.169263	10	11.990

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 45 FLT 15.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.155866E 04

ZERO POSITION USED 1.15 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1765493E 03							
0.3464780E 03	-0.3762346E 02	0.3485146E 03	353.802	353.802	0.744779	1	1.199
-0.5499168E 02	0.1724214E 03	0.1809785E 03	107.690	53.845	0.386753	2	2.398
-0.1636075E 03	0.1727457E 03	0.2379254E 03	133.444	44.481	0.508449	3	3.597
-0.3053911E 03	0.1218180E 03	0.3287908E 03	158.253	39.563	0.702629	4	4.796
0.7369780E 02	-0.4621040E 03	0.4679438E 03	279.061	55.812	1.000000	5	5.995
0.1886203E 02	-0.4328246E 02	0.4721384E 02	293.547	48.925	0.100896	6	7.194
0.5932204E 02	-0.2469286E 02	0.6425604E 02	337.400	48.200	0.137316	7	8.393
-0.2366391E 03	0.1943718E 02	0.2374360E 03	175.304	21.913	0.507403	8	9.592
0.1343610E 03	0.5769888E 02	0.1462260E 03	23.240	2.582	0.312486	9	10.791
0.9411734E 02	0.3380780E 02	0.1000052E 03	19.759	1.976	0.213712	10	11.990

Table III. (Continued)

TEST 15 N = 4

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 46 FLT 15.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.757914E 04

ZERO POSITION USED 9.51 LOAD/IN USED -26400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2704398E 04							
-0.1790212E 04	0.1471511E 04	0.2317370E 04	140.581	140.581	0.415642	1	1.193
0.2389080E 04	0.5634023E 03	0.2454613E 04	13.269	6.635	0.440258	2	2.387
0.4724387E 04	-0.2960621E 04	0.5575398E 04	327.926	109.309	1.000000	3	3.580
0.4329568E 03	0.2503985E 03	0.5001855E 03	30.040	7.510	0.089713	4	4.773
0.1482684E 03	0.1567996E 03	0.2158000E 03	46.602	9.320	0.038706	5	5.967
-0.8880566E 02	0.7119058E 02	0.1138180E 03	141.283	23.547	0.020414	6	7.160
-0.7769992E 02	-0.1323773E 02	0.7881949E 02	189.669	27.096	0.014137	7	8.353
0.1391363E 02	0.1455647E 02	0.2013652E 02	46.293	5.787	0.003612	8	9.547
-0.4608805E 01	-0.4586670E 02	0.4609767E 02	254.262	29.352	0.008268	9	10.740
0.1941748E 02	-0. 508011E 03	0.1520461E 03	277.337	27.734	0.027271	10	11.933

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 46 FLT 15.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.727484E 04

ZERO POSITION USED 3.75 LOAD/IN USED 25900.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.3168299E 04							
-0.1594072E 04	0.4282500E 03	0.1650595E 04	154.962	164.962	0.300530	1	1.193
0.2590189E 04	0.2581182E 03	0.2603018E 04	5.691	2.845	0.473942	2	2.387
0.4431561E 04	-0.3243885E 04	0.5492273E 04	323.798	107.933	1.000000	3	3.580
0.4543201E 03	0.3473081E 03	0.5718650E 03	37.396	9.349	0.104122	4	4.773
0.6085649E 02	0.3048198E 03	0.3108354E 03	78.709	15.742	0.056595	5	5.967
-0.2742696E 02	0.1204906E 03	0.1235727E 03	102.824	17.137	0.022499	6	7.160
-0.7245317E 02	0.5014871E 02	0.8811555E 02	145.311	20.759	0.016044	7	8.353
-0.4179076E 02	-0.1246529E 02	0.4361021E 02	196.609	24.576	0.007940	8	9.547
-0.2168909E 02	-0.3575488E 02	0.4185318E 02	238.787	26.532	0.007620	9	10.740
-0.2749619E 02	-0.1280525E 03	0.1309713E 03	257.881	25.788	0.023846	10	11.933

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 46 FLT 15.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.778399E 04

ZERO POSITION USED 8.27 LOAD/IN USED -30400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2960123E 04							
-0.1222292E 04	0.2426496E 03	0.1246144E 04	158.772	168.772	0.229849	1	1.193
0.1921512E 04	0.1352167E 04	0.2349588E 04	35.134	17.567	0.433377	2	2.387
0.5025125E 04	-0.2035111E 04	0.5421582E 04	337.953	112.651	1.000000	3	3.580
0.3795286E 03	0.5820576E 03	0.6948618E 03	56.894	14.223	0.128166	4	4.773
-0.3420647E 01	0.2334866E 03	0.2335117E 03	90.839	18.168	0.043071	5	5.967
-0.1254865E 03	0.1204083E 03	0.1739110E 03	136.183	22.697	0.032078	6	7.160
-0.1374693E 03	0.1459082E 03	0.2004670E 03	133.294	19.042	0.036976	7	8.353
-0.1027926E 03	0.5180220E 02	0.1151077E 03	153.254	19.157	0.021231	8	9.547
0.1168904E 01	-0.2093681E 02	0.2096942E 02	273.196	30.355	0.003868	9	10.740
-0.3018262E 02	-0.1506920E 03	0.1536850E 03	258.674	25.857	0.028347	10	11.933

Table III. (Continued)

TEST 15 N = 4 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 46 FLT 15.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.298634E 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1158954E 04							
-0.4691959E 02	-0.6367639E 03	0.6384902E 03	265.786	265.786	0.339728	1	1.193
0.9293550E 03	0.3158572E 03	0.9815632E 03	18.771	9.386	0.522271	2	2.387
0.1421227E 04	-0.1229763E 04	0.1879415E 04	319.131	106.377	1.000000	3	3.580
0.1109520E 03	0.2C87158E 03	0.2363739E 03	52.005	15.531	0.125770	4	4.773
0.1084109E 03	0.6662738E 02	0.1272483E 03	31.574	6.315	0.067706	5	5.967
0.6178284E 01	0.6593584E 01	0.9331741E 01	48.542	8.090	0.004965	6	7.160
0.6628174E 02	0.1C79523E 02	0.6715504E 02	9.250	1.321	0.035732	7	8.353
0.6389740E 02	0.1483468E 03	0.1615229E 03	66.697	8.337	0.085943	8	9.547
0.8669281E 02	0.1144002E 03	0.1435376E 03	52.845	5.872	0.076374	9	10.740
0.1335718E 02	0.3312715E 03	0.3315405E 03	87.691	8.769	0.176406	10	11.933

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 46 FLT 15.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.299271E 04

ZERO POSITION USED 3.11 LOAD/IN USED -20300.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.1849430E 04							
0.5653096E 03	-0.7C98463E 02	0.5697488E 03	352.843	352.843	0.488059	1	1.193
-0.6347017E 03	0.9061177E 01	0.6347664E 03	179.182	89.591	0.543754	2	2.387
-0.7329885E 03	0.3855562E 03	0.8282063E 03	152.255	50.752	0.709459	3	3.580
-0.2534686E 02	-0.1884559E 03	0.1901528E 03	252.340	65.585	0.162889	4	4.773
-0.2687527E 03	-0.1136021E 04	0.1167378E 04	256.690	51.338	1.000000	5	5.967
-0.4641526E 01	0.1726384E 03	0.1727008E 03	91.540	15.257	0.147939	6	7.160
0.3748779E 03	0.2C47955E 03	0.4271704E 03	28.648	4.093	0.365923	7	8.353
-0.3552134E 03	0.3933295E 02	0.3573843E 03	173.681	21.710	0.306143	8	9.547
0.1542680E 03	-0.1060910E 02	0.1546324E 03	356.066	39.563	0.132461	9	10.740
0.2189835E 03	0.8112912E 02	0.2335288E 03	20.329	2.033	0.200046	10	11.933

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 46 FLT 15.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.191062E 04

ZERO POSITION USED 1.15 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.3808407E 01							
0.2600034E 03	-0.2C60789E 02	0.2608186E 03	355.468	355.468	0.353604	1	1.193
-0.4074631E 03	-0.4786655E 02	0.4102649E 03	186.700	93.350	0.556216	2	2.387
-0.5213127E 03	0.3433792E 03	0.6242405E 03	146.628	48.876	0.846313	3	3.580
0.4962612E 01	-0.1655439E 03	0.1656183E 03	271.717	67.929	0.224537	4	4.773
-0.2172606E 03	-0.7C48774E 03	0.7376003E 03	252.869	50.574	1.000000	5	5.967
0.3149046E 02	0.1152240E 03	0.1194496E 03	74.714	12.452	0.161943	6	7.160
0.2700027E 03	0.7582405E 02	0.2804473E 03	15.686	2.241	0.380216	7	8.353
-0.2636794E 03	0.4989270E 02	0.2683582E 03	169.285	21.161	0.363826	8	9.547
0.8341194E 02	-0.4C08049E 02	0.9254187E 02	334.335	37.148	0.125463	9	10.740
0.1532652E 03	0.1436914E 02	0.1539373E 03	5.356	0.536	0.208700	10	11.933

Table III. (Continued)

TEST 15 N = 5

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 47 FLT 15.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.113892E 05

ZERO POSITION USED 9.51 LOAD/IN USED -26400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.3336091E 04							
-0.7878777E 03	0.7513672E 03	0.1088716E 04	136.359	136.359	0.135698	1	1.189
0.2475857E 04	0.3074130E 04	0.3947169E 04	51.153	25.576	0.491976	2	2.378
0.6407113E 04	-0.4828973E 04	0.8023094E 04	322.995	107.665	1.000000	3	3.567
0.6791309E 03	-0.7358165E 02	0.6831055E 03	353.816	88.454	0.085142	4	4.756
0.1919353E 03	-0.1341887E 03	0.2341917E 03	325.041	65.008	0.029190	5	5.945
-0.1586754E 03	0.1110963E 03	0.1937016E 03	145.002	24.167	0.024143	6	7.134
-0.5702505E 02	0.9C39604E 02	0.1068798E 03	122.245	17.464	0.013322	7	8.323
-0.1747612E 01	-0.1614352E 01	0.2379134E 01	222.730	27.841	0.000297	8	9.512
0.3963229E 02	-0.5537912E 02	0.7139046E 02	303.721	33.747	0.008898	9	10.702
0.1317967E 02	-0.4799684E 02	0.4977348E 02	285.354	28.535	0.006204	10	11.891

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 47 FLT 15.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.112539E 05

ZERO POSITION USED 3.75 LOAD/IN USED 25900.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.3704567E 04							
-0.7763301E 03	-0.1376188E 03	0.7884333E 03	190.052	190.052	0.099283	1	1.189
0.2253161E 04	0.2589073E 04	0.3743166E 04	52.991	26.495	0.471357	2	2.378
0.6211746E 04	-0.4947484E 04	0.7941246E 04	321.464	107.155	1.000000	3	3.567
0.7080168E 03	-0.3033513E 03	0.7702661E 03	336.807	84.202	0.096996	4	4.756
0.3100027E 03	-0.1800670E 02	0.3105251E 03	356.676	71.335	0.039103	5	5.945
0.6210704E 02	0.9806802E 02	0.1160802E 03	57.654	9.609	0.014617	6	7.134
0.2807831E 02	0.8700276E 02	0.9142140E 02	72.114	10.302	0.011512	7	8.323
-0.4047309E-01	-0.5341426E 02	0.5341428E 02	269.956	33.745	0.006726	8	9.512
0.2193900E 02	-0.3639812E 02	0.4249873E 02	301.079	33.453	0.005352	9	10.702
0.1033138E 03	-0.1798634E 03	0.2074237E 03	299.873	29.987	0.026120	10	11.891

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 47 FLT 15.0 TR 18 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.108032E 05

ZERO POSITION USED 8.27 LOAD/IN USED -30400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.3576779E 04							
-0.1851630E 03	-0.5832607E 03	0.6119463E 03	252.387	252.387	0.081906	1	1.189
0.1617033E 04	0.3840828E 04	0.4167344E 04	67.168	33.584	0.557778	2	2.378
0.6953609E 04	-0.2732786E 04	0.7471332E 04	338.545	112.848	1.000000	3	3.567
0.7907073E 03	0.3183240E 03	0.8523779E 03	21.929	5.482	0.114086	4	4.756
0.8811343E 02	0.1318197E 02	0.8909399E 02	8.508	1.702	0.011925	5	5.945
-0.1216147E 03	0.1127666E 03	0.1658506E 03	137.162	22.850	0.022198	6	7.134
-0.4517805E 02	0.1C64956E 02	0.4641626E 02	156.736	23.819	0.006213	7	8.323
-0.1203472E 03	-0.128C170E 02	0.1210262E 03	186.072	23.259	0.016199	8	9.512
0.4755791E 02	-0.1197108E 03	0.1288116E 03	291.667	32.437	0.017241	9	10.702
-0.2159819E 02	-0.1937040E 03	0.1949044E 03	253.637	26.364	0.026087	10	11.891

Table III. (Continued)

TEST 15 N = 5 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 47 FLT 15.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.401839E 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1324651E 04							
0.1803198E 03	-0.7666760E 03	0.7875959E 03	283.235	283.235	0.274401	1	1.189
0.7472942E 03	0.1015709E 04	0.1260997E 04	53.657	26.828	0.439336	2	2.378
0.2172318E 04	-0.1875974E 04	0.2870233E 04	319.187	106.396	1.000000	3	3.567
0.1103372E 03	0.7064088E 02	0.1310131E 03	32.628	8.157	0.045645	4	4.756
0.1728699E 03	-0.6412424E 02	0.1843798E 03	339.648	67.930	0.064239	5	5.945
-0.7182426E 02	-0.3663620E 02	0.8062837E 02	207.025	34.504	0.028091	6	7.134
0.1833623E 03	0.1791734E 02	0.1842356E 03	5.581	0.797	0.064188	7	8.323
0.2941742E 02	0.2036790E 03	0.2057924E 03	81.782	10.223	0.071699	8	9.512
0.8913335E 02	0.1066071E 03	0.1389598E 03	50.101	5.567	0.048414	9	10.702
0.7007602E 01	0.2634824E 03	0.2635754E 03	88.476	8.848	0.091831	10	11.891

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 47 FLT 15.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.425280E 04

ZERO POSITION USED 3.11 LOAD/IN USED -20300.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.1876872E 04							
0.6529841E 03	-0.8529210E 02	0.6585310E 03	352.558	352.558	0.283020	1	1.189
-0.9388645E 03	-0.2350133E 03	0.9678315E 03	194.053	97.027	0.415949	2	2.378
-0.1014747E 04	0.4461230E 03	0.1108484E 04	156.268	52.089	0.476398	3	3.567
0.1855971E 03	-0.6790728E 03	0.7039788E 03	285.286	71.322	0.302552	4	4.756
-0.1366938E 04	-0.1882946E 04	0.2326802E 04	234.022	46.804	1.000000	5	5.945
0.1740939E 03	-0.5293024E 02	0.1819623E 03	343.089	57.181	0.078203	6	7.134
0.4895559E 03	0.6242158E 03	0.7932908E 03	51.894	7.413	0.340936	7	8.323
-0.1124139E 03	0.2136998E 03	0.2414632E 03	117.746	14.718	0.103775	8	9.512
-0.6131168E 02	-0.8713670E 01	0.6192778E 02	188.089	20.899	0.026615	9	10.702
0.1527308E 03	0.2927146E 03	0.3301643E 03	62.446	6.245	0.141896	10	11.891

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 47 FLT 15.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.279050E 04

ZERO POSITION USED 1.15 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.1231280E 03							
0.2970742E 03	0.4227711E 02	0.3000674E 03	8.099	8.099	0.212331	1	1.189
-0.5902927E 03	-0.1305789E 03	0.6045630E 03	192.474	96.237	0.427796	2	2.378
-0.6448911E 03	0.4036675E 03	0.7607993E 03	147.957	49.319	0.538350	3	3.567
0.1370652E 03	-0.4618232E 03	0.4817339E 03	286.530	71.633	0.340880	4	4.756
-0.8785923E 03	-0.1106898E 04	0.1413205E 04	231.559	46.312	1.000000	5	5.945
0.7523497E 02	-0.4474390E 02	0.8753464E 02	329.259	54.876	0.061941	6	7.134
0.3395278E 03	0.3564695E 03	0.4922900E 03	46.394	6.628	0.348350	7	8.323
-0.2875719E 01	0.1407870E 03	0.1408163E 03	91.170	11.396	0.099643	8	9.512
-0.2915907E 02	0.5003050E 02	0.5790770E 02	120.235	13.359	0.040976	9	10.702
0.1289379E 03	0.1721789E 03	0.2151060E 03	53.172	5.317	0.152211	10	11.891

Table III. (Continued)

TEST 15 N = 6

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 48 FLT 15.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.205661E 05

ZERO POSITION USED 9.51 LOAD/IN USED -26400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.6272160E 04							
0.2682111E 04	-0.3325766E 04	0.4272520E 04	308.885	308.885	0.307325	1	1.166
0.2329776E 04	0.9584789E 04	0.9863875E 04	76.338	38.169	0.709514	2	2.331
0.1206950E 05	-0.6899367E 04	0.1390230E 05	330.246	110.382	1.000000	3	3.497
0.1468216E 04	-0.3420012E 03	0.1507522E 04	346.887	86.722	0.108437	4	4.662
0.1208236E 03	-0.2042566E 02	0.1225379E 03	350.405	70.081	0.008814	5	5.828
-0.2528850E 03	0.2C59861E 03	0.3261611E 03	140.836	23.473	0.023461	6	6.993
-0.7005099E 01	0.6777257E 02	0.6813361E 02	95.901	13.700	0.004901	7	8.159
-0.5488844E 02	-0.1C29474E 03	0.1166658E 03	241.935	30.242	0.008392	8	9.324
0.7502213E 02	-0.1C27051E 03	0.1271875E 03	306.147	34.016	0.009149	9	10.490
0.1489708E 03	0.1236013E 02	0.1494827E 03	4.743	0.474	0.010752	10	11.655

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 48 FLT 15.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.201766E 05

ZERO POSITION USED 3.75 LOAD/IN USED 25900.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.6291438E 04							
0.2953501E 04	-0.4508703E 04	0.5390168E 04	303.231	303.231	0.413029	1	1.166
0.3145710E 04	0.9220242E 04	0.9742094E 04	71.162	35.581	0.746502	2	2.331
0.1086998E 05	-0.7221813E 04	0.1305033E 05	326.401	108.800	1.000000	3	3.497
0.1218487E 04	-0.5799932E 03	0.1349482E 04	334.546	83.636	0.103406	4	4.662
-0.7999077E 02	0.4567686E 02	0.9211349E 02	150.272	30.054	0.007058	5	5.828
-0.1508278E 03	0.2323991E 03	0.2770530E 03	122.984	20.497	0.021230	6	6.993
0.7837207E 02	-0.8229785E 02	0.1136447E 03	313.600	44.800	0.008708	7	8.159
-0.1063216E 02	0.1C33835E 03	0.1039287E 03	95.872	11.984	0.007964	8	9.324
0.2654947E 01	-0.1676139E 03	0.1676349E 03	270.907	30.101	0.012845	9	10.490
0.1345716E 03	0.4505522E 02	0.1419137E 03	18.511	1.851	0.010874	10	11.655

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 48 FLT 15.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.208517E 05

ZERO POSITION USED 8.27 LOAD/IN USED -30400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.6492891E 04							
0.3508837E 04	-0.4584965E 04	0.5773543E 04	307.427	307.427	0.472824	1	1.166
0.1936347E 04	0.1083449E 05	0.1100616E 05	79.867	39.933	0.901348	2	2.331
0.1158661E 05	-0.3854045E 04	0.1221078E 05	341.601	113.867	1.000000	3	3.497
0.1384741E 04	0.4363970E 03	0.1451878E 04	17.492	4.373	0.118901	4	4.662
0.1013637E 03	0.3497920E 02	0.1072294E 03	19.039	3.808	0.008782	5	5.828
-0.2746831E 03	0.1691377E 03	0.3225806E 03	148.377	24.730	0.026418	6	6.993
0.1355885E 01	0.9C06641E 02	0.9007675E 02	89.131	12.733	0.007377	7	8.159
-0.9406206E 02	-0.1626801E 02	0.9545844E 02	189.812	23.727	0.007818	8	9.324
0.1402046E 03	-0.2C70549E 03	0.2500581E 03	304.103	33.789	0.020478	9	10.490
0.1524902E 02	0.6043956E 02	0.6233356E 02	75.840	7.594	0.005105	10	11.655

Table III. (Continued)

TEST 15 M = 6 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 48 FLT 15.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.744390E 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1932415E 04							
0.1073578E 04	-0.1924727E 04	0.2203893E 04	299.152	299.152	0.463041	1	1.166
0.1127864E 04	0.2931328E 04	0.3140822E 04	68.955	34.478	0.659891	2	2.331
0.3866842E 04	-0.2775142E 04	0.4759609E 04	324.334	108.111	1.000000	3	3.497
0.4044741E 03	0.7510329E 02	0.4113877E 03	10.519	2.630	0.086433	4	4.662
0.3312033E 02	-0.2427879E 02	0.4106599E 02	323.757	64.751	0.008628	5	5.828
-0.1562008E 03	0.1074842E 03	0.1896089E 03	145.468	24.245	0.039837	6	6.993
0.1600202E 03	0.1722179E 02	0.1609442E 03	6.143	0.878	0.033815	7	8.159
0.4832707E 02	0.2011658E 03	0.2068893E 03	76.492	9.561	0.043468	8	9.324
0.4819063E 02	0.7106596E 02	0.8586447E 02	55.858	6.206	0.018040	9	10.490
-0.8525314E 02	0.2355401E 03	0.2504940E 03	109.898	10.990	0.052629	10	11.655

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 48 FLT 15.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.718250E 04

ZERO POSITION USED 3.11 LOAD/IN USED -20300.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.1887975E 04							
0.6660762E 03	-0.3185295E 03	0.7383215E 03	334.442	334.442	0.310068	1	1.166
-0.2002800E 04	-0.6615615E 03	0.2109235E 04	198.279	99.140	0.885803	2	2.331
-0.1897411E 04	0.5759084E 03	0.1982886E 04	163.116	54.372	0.832741	3	3.497
0.5093879E 03	-0.2326033E 04	0.2381156E 04	292.352	70.588	1.000000	4	4.662
-0.2004151E 04	-0.1077812E 04	0.2275587E 04	208.271	41.654	0.955665	5	5.828
0.2097033E 03	-0.4182488E 03	0.4678755E 03	296.628	49.438	0.196491	6	6.993
0.1790082E 04	0.3278462E 03	0.1819855E 04	10.378	1.483	0.764274	7	8.159
-0.4592957E 03	0.1278023E 03	0.4767451E 03	164.450	20.556	0.200216	8	9.324
0.2107973E 03	0.5086755E 02	0.2168479E 03	13.567	1.507	0.091068	9	10.490
0.2827248E 02	0.1859748E 03	0.1881116E 03	81.356	8.136	0.079000	10	11.655

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 48 FLT 15.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.465084E 04

ZERO POSITION USED 1.15 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.8341850E 02							
0.3004792E 03	0.3757393E 02	0.3028193E 03	7.128	7.128	0.200950	1	1.166
-0.1151309E 04	-0.5724473E 03	0.1285771E 04	206.437	103.219	0.853235	2	2.331
-0.1314193E 04	0.4740872E 03	0.1397090E 04	160.163	53.388	0.927106	3	3.497
0.2420980E 03	-0.1487363E 04	0.1506937E 04	279.245	69.811	1.000000	4	4.662
-0.1299167E 04	-0.5068354E 03	0.1394531E 04	201.312	40.262	0.925408	5	5.828
0.9747520E 02	-0.3506328E 03	0.3639294E 03	285.536	47.589	0.241503	6	6.993
0.1148539E 04	0.4053369E 02	0.1149253E 04	2.021	0.289	0.762642	7	8.159
-0.3251069E 03	0.1557592E 02	0.3254797E 03	177.257	22.157	0.215988	8	9.324
0.1594008E 03	-0.3571619E 02	0.1633532E 03	347.371	38.597	0.108401	9	10.490
0.8300671E 02	0.9115343E 02	0.1232845E 03	47.678	4.768	0.081811	10	11.655

Table III. (Continued)

TEST 15 R = 7

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 49 FLT 15.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = C.934079E 04

ZERO POSITION USED 9.51 LOAD/IN USED -26400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.3297013E 04							
-0.1017230E 04	0.9613557E 03	0.1399629E 04	136.618	136.618	0.210851	1	1.190
0.1992453E 04	0.2150682E 04	0.2931775E 04	47.187	23.594	0.441665	2	2.381
0.6253820E 04	-0.2225505E 04	0.6638004E 04	340.411	113.470	1.000000	3	3.571
0.3287000E 03	0.1987518E 03	0.3841169E 03	31.160	7.790	0.057866	4	4.762
0.6629790E 02	-0.2862338E 01	0.6635963E 02	357.528	71.506	0.009997	5	5.952
-0.1837056E 03	0.3548247E 02	0.1871009E 03	169.068	28.178	0.028186	6	7.143
-0.8129144E 02	-0.4871860E 02	0.9477234E 02	210.935	30.133	0.014277	7	8.333
-0.9731944E 02	-0.5762600E 01	0.9748988E 02	183.389	22.924	0.014687	8	9.524
-0.4305771E 02	-0.2200905E 03	0.2242628E 03	258.930	28.770	0.033785	9	10.714
0.4824100E 02	-0.1267068E 03	0.1355795E 03	290.843	29.084	0.020425	10	11.905

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 49 FLT 15.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.956580E 04

ZERO POSITION USED 3.75 LOAD/IN USED 25900.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.3497740E 04							
-0.6706069E 03	-0.6788655E 02	0.6740342E 03	185.780	185.780	0.103471	1	1.190
0.2144627E 04	0.2238576E 04	0.3100104E 04	46.228	23.114	0.475898	2	2.381
0.6077039E 04	-0.2346191E 04	0.6514215E 04	338.890	112.963	1.000000	3	3.571
0.3929839E 03	0.1641536E 03	0.4258901E 03	22.671	5.668	0.065379	4	4.762
0.9832600E 02	0.8631987E 02	0.1308400E 03	41.280	8.256	0.020085	5	5.952
-0.1291295E 03	0.2822588E 02	0.1321784E 03	167.670	27.945	0.020291	6	7.143
-0.1588866E 03	0.5849809E 02	0.1693132E 03	159.788	22.827	0.025991	7	8.333
-0.3255223E 02	-0.2873430E 02	0.4342014E 02	221.435	27.679	0.006665	8	9.524
0.2062361E 02	-0.1375344E 03	0.1390721E 03	278.528	30.948	0.021349	9	10.714
0.2004861E 02	-0.1028942E 03	0.1048292E 03	281.026	28.133	0.016092	10	11.905

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 49 FLT 15.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.103315E 05

ZERO POSITION USED 8.27 LOAD/IN USED -30400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.3577942E 04							
-0.7857486E 02	-0.5556255E 03	0.5611538E 03	261.951	261.951	0.084203	1	1.190
0.9438931E 03	0.3579965E 04	0.3702308E 04	75.229	37.615	0.555547	2	2.381
0.6599164E 04	-0.5291909E 03	0.6664258E 04	351.985	117.328	1.000000	3	3.571
0.4059517E 03	0.2705154E 03	0.4878271E 03	33.678	8.420	0.073200	4	4.762
0.2055757E 03	0.2885876E 02	0.2075914E 03	7.991	1.598	0.031150	5	5.952
-0.9333604E 02	-0.1300748E 03	0.1600970E 03	234.338	39.056	0.024023	6	7.143
0.7206535E 01	-0.1123988E 03	0.1126296E 03	273.668	39.095	0.016901	7	8.333
-0.1777317E 03	-0.3216595E 02	0.1806189E 03	190.258	23.782	0.027103	8	9.524
0.2882477E 02	-0.1308615E 03	0.1339985E 03	282.422	31.380	0.020107	9	10.714
0.3563551E 01	-0.2534147E 03	0.2534398E 03	270.806	27.081	0.038030	10	11.905

Table III. (Continued)

TEST 15 N = 7 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 49 FLT 15.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.327180E 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.126165E 04							
0.210344OE 03	-0.7119128E 03	0.7423372E 03	286.460	286.460	0.320140	1	1.190
0.8203008E 03	0.8748501E 03	0.1199273E 04	46.843	23.422	0.517197	2	2.381
0.2106965E 04	-0.9662429E 03	0.2318792E 04	335.319	111.773	1.000000	3	3.571
0.1967064E 02	0.2167241E 03	0.2176149E 03	84.814	21.203	0.093848	4	4.762
0.1499469E 03	-0.2756493E 02	0.1524595E 03	349.583	69.917	0.065750	5	5.952
-0.1654944E 03	-0.2664456E 02	0.1676255E 03	189.146	31.524	0.072290	6	7.143
0.1157528E 03	0.1131067E 02	0.1163041E 03	5.581	0.797	0.050157	7	8.333
0.1403440E 03	0.1199168E 03	0.1845981E 03	40.512	5.064	0.079610	8	9.524
0.3943213E 02	0.1218273E 03	0.1280499E 03	72.065	8.007	0.055223	9	10.714
-0.1868C45E 02	0.2698716E 03	0.2705173E 03	93.960	9.396	0.116663	10	11.905

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 49 FLT 15.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.387477E 04

ZERO POSITION USED 3.11 LOAD/IN USED -20300.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.1805258E 04							
0.5301318E 03	-0.3389247E 02	0.5312141E 03	356.342	356.342	0.263634	1	1.190
-0.8690481E 03	-0.3773940E 03	0.9476548E 03	203.473	101.737	0.470208	2	2.381
-0.7388308E 03	0.2404239E 03	0.7769651E 03	161.975	53.992	0.385596	3	3.571
0.3504163E 03	-0.4105491E 03	0.5397610E 03	310.482	77.620	0.267875	4	4.762
-0.7898953E 03	-0.1653691E 04	0.2014970E 04	246.920	49.384	1.000000	5	5.952
-0.2587629E 03	0.2943191E 03	0.3918953E 03	131.322	21.887	0.194492	6	7.143
0.2147751E 03	0.5872568E 03	0.6252991E 03	69.911	9.987	0.310327	7	8.333
-0.1021552E 03	0.3558320E 03	0.3702053E 03	106.018	13.252	0.183727	8	9.524
0.8351295E 02	0.2578482E 02	0.8740289E 02	17.158	1.906	0.043377	9	10.714
0.1044627E 03	0.1765598E 03	0.2051483E 03	59.389	5.939	0.101812	10	11.905

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 49 FLT 15.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.251397E 04

ZERO POSITION USED 1.15 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.3737209E 02							
0.2264321E 03	0.2032750E 02	0.2273427E 03	5.130	5.130	0.196553	1	1.190
-0.4718584E 03	-0.2284939E 03	0.5242708E 03	205.838	102.919	0.453267	2	2.381
-0.4674456E 03	0.1889671E 03	0.5041963E 03	157.989	52.663	0.435911	3	3.571
0.2668394E 03	-0.2856313E 03	0.3908816E 03	313.052	78.263	0.337943	4	4.762
-0.5571746E 03	-0.1C13606E 04	0.1156650E 04	241.203	48.240	1.000000	5	5.952
-0.1713633E 03	0.1874710E 03	0.2539897E 03	132.430	22.072	0.219591	6	7.143
0.2220318E 03	0.3526843E 03	0.4167544E 03	57.808	8.258	0.360312	7	8.333
-0.1106673E 03	0.2080675E 03	0.2356678E 03	118.008	14.751	0.203750	8	9.524
0.3617000E 02	-0.3591127E 02	0.5096948E 02	315.206	35.023	0.044066	9	10.714
0.1600773E 03	0.1187123E 03	0.1992921E 03	36.560	3.656	0.172301	10	11.905

Table III. (Continued)

TEST 15 N = 8

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 50 FLT 15.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.121676E 05

ZERO POSITION USED 9.51 LOAD/IN USED -26400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.4255875E 04							
-0.1486547E 04	-0.8193799E 03	0.1697411E 04	208.863	208.853	0.223395	1	1.203
0.5425328E 04	0.2551781E 04	0.5995477E 04	25.190	12.595	0.789059	2	2.407
0.5652234E 04	-0.5077973E 04	0.7598258E 04	318.063	106.021	1.000000	3	3.610
0.5397478E 03	0.1085552E 03	0.5505559E 03	11.372	2.843	0.072458	4	4.813
-0.5387564E 02	0.9608180E 02	0.1101558E 03	119.281	23.856	0.014497	5	6.017
-0.1447784E 03	0.4278413E 02	0.1509678E 03	163.537	27.256	0.019869	6	7.220
-0.1911042E 03	-0.7752637E 02	0.2062308E 03	202.081	28.859	0.027142	7	8.424
-0.3733571E 02	-0.7663845E 01	0.3811417E 02	191.600	23.950	0.005016	8	9.627
0.5052470E 02	-0.1509547E 03	0.1591857E 03	288.505	32.056	0.020950	9	10.830
0.1623677E 03	-0.6999837E 02	0.1768136E 03	336.678	33.668	0.023270	10	12.034

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 50 FLT 15.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.104902E 05

ZERO POSITION USED 3.75 LOAD/IN USED 25900.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.4051263E 04							
-0.1370568E 04	-0.1182181E 04	0.1809975E 04	220.779	220.779	0.279542	1	1.203
0.5396738E 04	0.1085707E 04	0.5504863E 04	11.375	5.687	0.850199	2	2.407
0.4364516E 04	-0.4782672E 04	0.6474793E 04	312.383	104.128	1.000000	3	3.610
0.4384819E 03	0.2148622E 03	0.4882952E 03	26.105	6.526	0.075415	4	4.813
0.3191565E 02	0.2781936E 03	0.2800183E 03	83.455	16.691	0.043247	5	6.017
-0.5047656E 02	0.1205113E 03	0.1306555E 03	112.727	18.798	0.020179	6	7.220
-0.5459721E 02	0.1324050E 03	0.1432199E 03	112.409	16.058	0.022120	7	8.424
-0.1704514E 02	-0.1545968E 02	0.2301170E 02	222.208	27.776	0.003554	8	9.627
-0.4602338E 02	0.1022512E 02	0.4714557E 02	167.474	18.608	0.007281	9	10.830
0.6112428E 02	-0.1722116E 03	0.1827375E 03	289.542	28.954	0.028223	10	12.034

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 50 FLT 15.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.901056E 04

ZERO POSITION USED 8.27 LOAD/IN USED -30400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.3869695E 04							
-0.1117977E 04	-0.1231891E 04	0.1663559E 04	227.775	227.775	0.268281	1	1.203
0.4201098E 04	0.1908970E 04	0.4614477E 04	24.437	12.218	0.744174	2	2.407
0.5359238E 04	-0.3119068E 04	0.6200805E 04	329.801	109.934	1.000000	3	3.610
0.3426787E 03	0.6660046E 03	0.7489932E 03	62.773	15.693	0.120790	4	4.813
-0.2805437E 02	0.3806030E 03	0.3816355E 03	94.216	18.843	0.061546	5	6.017
-0.1274782E 03	0.2314864E 03	0.2642661E 03	118.841	19.807	0.042618	6	7.220
-0.9669846E 02	0.1505360E 03	0.1789181E 03	122.715	17.531	0.028854	7	8.424
-0.7037190E 02	0.1446791E 03	0.1608858E 03	115.938	14.492	0.025946	8	9.627
-0.8536925E 02	-0.1056191E 03	0.1358061E 03	231.052	25.672	0.021901	9	10.830
0.1072064E 03	-0.1306049E 03	0.1689700E 03	309.381	30.938	0.027250	10	14.034

Table III (Continued)

TEST 15 N = 8 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 50 FLT 15.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.373293E 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1408065E 04							
-0.1737556E 02	-0.1103113E 04	0.1103249E 04	269.097	269.097	0.477542	1	1.203
0.1803776E 04	0.5220576E 03	0.1877805E 04	16.142	8.071	0.812810	2	2.407
0.1455330E 04	-0.1794251E 04	0.2310264E 04	309.046	103.015	1.000000	3	3.610
0.8640869E 02	0.2819443E 03	0.2948882E 03	72.961	18.240	0.127643	4	4.813
0.7256021E 02	0.1673856E 02	0.7446581E 02	12.990	2.598	0.032233	5	6.017
-0.4090436E 02	-0.3524854E 02	0.5399654E 02	220.752	36.792	0.023372	6	7.220
0.4763335E 02	0.1415381E 02	0.4969171E 02	16.549	2.364	0.021509	7	8.424
0.8176247E 02	0.2127081E 03	0.2278812E 03	68.974	8.622	0.098639	8	9.627
0.4509911E 02	0.1171785E 03	0.1255576E 03	58.949	7.661	0.054348	9	10.830
-0.1047362E 03	0.3505605E 03	0.3658721E 03	106.634	10.663	0.158368	10	12.034

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 50 FLT 15.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.318173E 04

ZERO POSITION USED 3.11 LOAD/IN USED -20300.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.1858765E 04							
0.3811543E 03	-0.1642556E 03	0.4150403E 03	336.687	336.687	0.352936	1	1.203
-0.9757673E 03	0.1822316E 03	0.9926379E 03	159.421	84.711	0.844106	2	2.407
-0.8200420E 03	0.5529937E 03	0.9890757E 03	146.006	48.669	0.841077	3	3.610
-0.5276292E 01	-0.6142314E 03	0.6142542E 03	269.508	67.377	0.522341	4	4.813
-0.3171016E 03	-0.1132404E 04	0.1175963E 04	254.356	50.871	1.000000	5	6.017
0.2959583E 03	0.3061514E 03	0.4258167E 03	45.970	7.662	0.362100	6	7.220
0.5416086E 03	0.3970276E 03	0.6715435E 03	36.243	5.178	0.571058	7	8.424
-0.2988772E 03	-0.3623340E 02	0.3010654E 03	196.912	23.364	0.256016	8	9.627
-0.4389236E 02	-0.8449805E 02	0.9521796E 02	242.550	26.950	0.080970	9	10.830
0.1709584E 03	0.3689783E 03	0.4066592E 03	65.140	6.514	0.345809	10	12.034

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 50 FLT 15.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.243855E 04

ZERO POSITION USED 1.15 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2415570E 02							
0.2258504E 03	0.7301828E 02	0.2373606E 03	17.916	17.916	0.351545	1	1.203
-0.6103521E 03	0.5245854E 02	0.6126023E 03	175.088	87.544	0.907300	2	2.407
-0.5471221E 03	0.3956548E 03	0.6751926E 03	144.127	48.042	1.000000	3	3.610
-0.9030646E 01	-0.3586379E 03	0.3987402E 03	268.702	67.176	0.590558	4	4.813
-0.2373190E 03	-0.6189722E 03	0.6629077E 03	249.023	49.805	0.981805	5	6.017
0.2160355E 03	0.2095207E 03	0.3009490E 03	44.123	7.354	0.445723	6	7.220
0.4035853E 03	0.2073702E 03	0.4537434E 03	27.195	3.885	0.672021	7	8.424
-0.2400450E 03	-0.3536932E 02	0.2426368E 03	188.382	23.548	0.359359	8	9.627
-0.6229626E 02	-0.5063651E 02	0.8028000E 02	219.105	24.345	0.118899	9	10.830
0.2351547E 03	0.2129429E 03	0.2956909E 03	46.067	4.607	0.437936	10	12.034

Table III. (Continued)

TEST 15 N = 9

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 51 FLT 15.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.173296E 05

ZERO POSITION USED 9.51 LOAD/IN USED -26400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.5467406E 04							
-0.1098673E 04	-0.3413399E 04	0.3585857E 04	252.158	252.158	0.373414	1	1.200
0.7373805E 04	0.4257227E 04	0.8514516E 04	30.000	15.000	0.886661	2	2.401
0.6756840E 04	-0.6823543E 04	0.9602895E 04	314.719	104.906	1.000000	3	3.601
0.8273093E 03	-0.5575940E 02	0.8291863E 03	356.144	89.036	0.086348	4	4.802
-0.4651898E 02	0.8566449E 02	0.9748035E 02	118.504	23.701	0.010151	5	6.002
-0.2466453E 03	0.1940562E 03	0.3138337E 03	141.805	23.634	0.032681	6	7.203
0.3984613E 02	0.2119585E 02	0.4513289E 02	28.010	4.001	0.004700	7	8.403
-0.6491135E 02	0.2110481E 02	0.6825607E 02	151.989	20.249	0.007108	8	9.604
0.5118835E 02	-0.9191428E 02	0.1052068E 03	299.114	33.235	0.010956	9	10.804
0.1564825E 03	0.2506575E 02	0.1584774E 03	9.100	0.910	0.016503	10	12.005

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 51 FLT 15.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.165593E 05

ZERO POSITION USED 3.75 LOAD/IN USED 25900.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.5785953E 04							
-0.8326721E 03	-0.3594772E 04	0.4080631E 04	258.226	258.226	0.423537	1	1.200
0.7493973E 04	0.4071535E 04	0.8528598E 04	28.516	14.258	0.885201	2	2.401
0.6421781E 04	-0.7182418E 04	0.9634645E 04	311.800	103.933	1.000000	3	3.601
0.7643545E 03	-0.1723102E 03	0.7835359E 03	347.296	86.824	0.081325	4	4.802
-0.1399316E 03	0.1517624E 03	0.2064284E 03	132.677	26.535	0.021426	5	6.002
-0.1375233E 03	0.2183029E 03	0.2580093E 03	122.210	20.368	0.026779	6	7.203
-0.4130783E 02	0.7394639E 01	0.4196448E 02	169.851	24.264	0.004356	7	8.403
-0.1371252E 03	-0.6760362E 02	0.1528842E 03	206.244	25.780	0.015868	8	9.604
-0.7664192E 02	-0.7597340E 02	0.1107688E 03	226.219	25.135	0.011497	9	10.804
0.2538884E 03	-0.8224707E 02	0.2668779E 03	342.050	34.235	0.027700	10	12.005

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 51 FLT 15.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.152378E 05

ZERO POSITION USED 8.27 LOAD/IN USED -30400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.5658535E 04							
-0.3133684E 03	-0.4568426E 04	0.4579160E 04	256.076	266.076	0.503820	1	1.200
0.6515668E 04	0.5708480E 04	0.8662602E 04	41.222	20.611	0.953098	2	2.401
0.7396531E 04	-0.5281969E 04	0.9088887E 04	324.469	108.156	1.000000	3	3.601
0.8665754E 03	0.1285700E 03	0.8760610E 03	8.439	2.110	0.096388	4	4.802
-0.2055259E 03	0.2013490E 03	0.2877190E 03	135.588	27.118	0.031656	5	6.002
-0.5370094E 02	0.4267784E 02	0.6859438E 02	141.525	23.587	0.007547	6	7.203
-0.7433745E 02	0.1629915E 02	0.7610332E 02	167.633	23.948	0.008373	7	8.403
-0.7237500E 02	-0.1065348E 03	0.1287937E 03	235.810	29.476	0.014170	8	9.604
0.4251431E 02	-0.1137090E 03	0.1213969E 03	290.500	32.278	0.013357	9	10.804
0.2188564E 03	-0.1143003E 03	0.2469063E 03	332.424	33.242	0.027166	10	12.005

Table III (Continued)

TEST 15 N = 9 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 51 FLT 15.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.579702E 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1780191E 04							
0.9197916E 02	-0.1839430E 04	0.1841729E 04	272.863	272.863	0.539211	1	1.200
0.2376043E 04	0.1366778E 04	0.2741106E 04	29.909	14.954	0.802526	2	2.401
0.2066307E 04	-0.2719684E 04	0.3415597E 04	307.226	102.409	1.000000	3	3.601
0.1680677E 03	0.1136263E 03	0.2028736E 03	34.062	8.515	0.059396	4	4.802
0.2021791E 02	-0.3431645E 02	0.3982942E 02	300.505	60.101	0.011661	5	6.002
-0.8508815E 02	0.2527286E 02	0.8876208E 02	163.458	27.243	0.025987	6	7.203
0.9535046E 02	-0.2493365E 02	0.9855655E 02	345.345	49.335	0.028855	7	8.403
-0.3083911E 02	0.2019028E 03	0.2042444E 03	98.684	12.336	0.059798	8	9.604
-0.4029602E 02	0.1601598E 03	0.1651512E 03	104.123	11.569	0.048352	9	10.804
-0.2884626E 03	0.2071563E 03	0.3551399E 03	144.316	14.432	0.103976	10	12.005

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 51 FLT 15.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.648945E 04

ZERO POSITION USED 3.11 LOAD/IN USED -20300.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.2047933E 04							
0.4687056E 03	-0.2478977E 03	0.5302246E 03	332.125	332.125	0.201256	1	1.200
-0.1554122E 04	0.1174145E 03	0.1558551E 04	175.679	87.840	0.591575	2	2.401
-0.1161680E 04	0.8247998E 03	0.1424709E 04	144.625	48.208	0.540773	3	3.601
-0.8163867E 03	-0.1350983E 04	0.1578494E 04	238.856	59.714	0.599145	4	4.802
-0.1614271E 04	-0.2082099E 04	0.2634579E 04	232.213	46.443	1.000000	5	6.002
-0.2872141E 03	-0.2937815E 03	0.4108521E 03	225.648	37.609	0.155946	6	7.203
0.1341462E 04	0.1598596E 03	0.1350953E 04	6.796	0.971	0.512778	7	8.403
0.1849605E 03	-0.1516000E 03	0.2391505E 03	320.661	40.383	0.090774	8	9.604
0.3383205E 01	0.2550889E 01	0.4237111E 01	37.016	4.113	0.001608	9	10.804
-0.2109702E 02	0.3654980E 03	0.3860747E 03	93.133	9.313	0.146541	10	12.005

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 51 FLT 15.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.447486E 04

ZERO POSITION USED 1.15 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.1325864E 03							
0.1508787E 03	0.2624652E 02	0.1531445E 03	9.868	9.858	0.100277	1	1.200
-0.9756267E 03	-0.3286268E 01	0.9756321E 03	180.193	90.096	0.638830	2	2.401
-0.7095289E 03	0.7162319E 03	0.1008176E 04	134.731	44.910	0.660139	3	3.601
-0.5327253E 03	-0.9062000E 03	0.1051187E 04	239.550	59.888	0.688302	4	4.802
-0.1061482E 04	-0.1098021E 04	0.1527218E 04	225.969	45.194	1.000000	5	6.002
-0.1552873E 03	-0.1630858E 03	0.2251913E 03	226.403	37.734	0.147452	6	7.203
0.8506445E 03	-0.3862292E 02	0.8515208E 03	357.400	51.057	0.557563	7	8.403
0.5324695E 02	-0.5898047E 02	0.7946024E 02	312.075	39.009	0.052029	8	9.604
0.2112488E 02	-0.2904846E 02	0.3591759E 02	306.026	34.003	0.023518	9	10.804
0.1663040E 03	0.3549929E 03	0.3920166E 03	64.898	6.490	0.256687	10	12.005

Table III. (Continued)

TEST 15 N = 10

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 52 FLT 15.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.757916E 04

ZERO POSITION USED 9.51 LOAD/IN USED -26400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1621639E 04							
-0.2601116E 04	0.3588335E 04	0.4431926E 04	125.938	125.938	1.000000	1	1.200
0.1406970E 04	-0.1761081E 04	0.2254101E 04	308.622	154.311	0.508605	2	2.401
0.1767661E 04	-0.1906347E 04	0.2599760E 04	312.838	104.279	0.586600	3	3.601
0.1436191E 03	0.3528040E 03	0.3809160E 03	67.850	16.962	0.085948	4	4.802
0.6360864E 02	0.1584891E 03	0.1708518E 03	68.070	13.614	0.036550	5	6.002
-0.1321465E 03	-0.4776146E 01	0.1322327E 03	182.070	30.345	0.029836	6	7.203
-0.1120696E 03	-0.5074018E 01	0.1122044E 03	182.592	26.085	0.025317	7	8.403
-0.5184381E 02	-0.1490384E 02	0.5394353E 02	196.039	24.505	0.012172	8	9.604
-0.1357709E 03	-0.9618587E 02	0.1663895E 03	215.315	23.924	0.037543	9	10.804
0.3147484E 01	-0.1748397E 03	0.1748680E 03	271.031	27.103	0.039456	10	12.005

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 52 FLT 15.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.639060E 04

ZERO POSITION USED 3.75 LOAD/IN USED 25900.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1490602E 04							
-0.2306250E 04	0.3137144E 04	0.3893644E 04	126.321	126.321	1.000000	1	1.200
0.3340527E 03	-0.1924134E 04	0.1952916E 04	279.849	139.924	0.501565	2	2.401
0.1604373E 04	-0.1269461E 04	0.2045860E 04	321.647	107.216	0.525436	3	3.601
0.9589806E 02	0.5284148E 03	0.5370461E 03	79.714	19.928	0.137929	4	4.802
0.2273796E 02	0.3359663E 03	0.3367349E 03	86.128	17.226	0.086483	5	6.002
-0.1509553E 03	0.1380191E 03	0.2045404E 03	137.563	22.927	0.052532	6	7.203
-0.1056145E 03	0.1825415E 02	0.1071803E 03	170.194	24.313	0.027527	7	8.403
0.6684282E 02	0.1533302E 03	0.1672720E 03	66.446	8.306	0.042960	8	9.604
-0.8628770E 02	-0.6457632E 02	0.1077760E 03	216.811	24.090	0.027680	9	10.804
-0.1305947E 02	-0.1628570E 03	0.1633797E 03	265.415	26.542	0.041961	10	12.005

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 52 FLT 15.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.660460E 04

ZERO POSITION USED 8.27 LOAD/IN USED -30400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1732628E 04							
-0.1471241E 04	0.2586574E 04	0.2975721E 04	119.631	119.631	0.875927	1	1.200
0.4318440E 03	0.1817675E 03	0.4683388E 03	22.827	11.413	0.137918	2	2.401
0.2985090E 04	-0.1621844E 04	0.3397225E 04	331.484	110.495	1.000000	3	3.601
0.1734929E 03	0.5423311E 03	0.5694055E 03	72.260	18.065	0.167609	4	4.802
-0.6979297E 02	0.2984185E 03	0.3064712E 03	103.164	20.633	0.090212	5	6.002
-0.3836391E 02	0.2662695E 02	0.4609887E 02	145.237	24.206	0.013746	6	7.203
-0.1229112E 03	-0.1060935E 02	0.1233856E 03	185.026	26.432	0.036320	7	8.403
-0.6170616E 02	-0.3362266E 02	0.7029100E 02	208.614	26.077	0.020691	8	9.604
-0.6076079E 02	0.1270754E 02	0.6207539E 02	168.187	18.687	0.018272	9	10.804
0.1756645E 01	-0.1863485E 03	0.1863568E 03	270.540	27.054	0.054856	10	12.005

Table III. (Continued)

TEST 15 N = 10 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 52 FLT 15.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.155905E 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.9041318E 03							
-0.1333198E 03	-0.3202100E 02	0.1371113E 03	193.506	193.506	0.238498	1	1.200
0.3104883E 03	-0.3303347E 03	0.4533474E 03	313.226	156.613	0.788574	2	2.401
0.3977737E 03	-0.4150671E 03	0.5748953E 03	313.781	104.594	1.000000	3	3.601
-0.3846121E 02	0.2385748E 03	0.2416551E 03	99.158	24.790	0.420346	4	4.802
0.5343164E 02	0.7346007E 02	0.9083676E 02	53.969	10.794	0.158006	5	6.002
-0.2433284E 02	-0.5426214E 02	0.5946645E 02	245.655	40.976	0.103473	6	7.203
0.8454399E 02	-0.4320203E 02	0.9494260E 02	332.933	47.562	0.165148	7	8.403
0.1137341E 03	0.1496749E 03	0.1879841E 03	52.770	6.596	0.326988	8	9.604
0.6159993E 02	0.5261656E 02	0.8101266E 02	40.503	4.500	0.140917	9	10.804
-0.8433003E 01	0.2745347E 03	0.2746641E 03	91.759	9.176	0.477764	10	12.005

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 52 FLT 15.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.315021E 04

ZERO POSITION USED 3.11 LOAD/IN USED -20300.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.1633602E 04							
0.6965376E 03	-0.2150193E 03	0.7270596E 03	342.798	342.798	0.449252	1	1.200
-0.1803246E 03	-0.1013593E 02	0.1806093E 03	183.217	91.609	0.111599	2	2.401
-0.5451118E 03	0.2480298E 03	0.5988870E 03	155.534	51.845	0.370054	3	3.601
-0.1200533E 03	-0.8258192E 00	0.1200561E 03	180.394	45.099	0.074183	4	4.802
0.6482109E 03	-0.1482892E 04	0.1618378E 04	293.611	58.722	1.000000	5	6.002
0.3562656E 03	0.1774605E 03	0.3980168E 03	26.478	4.413	0.245936	6	7.203
0.8898024E 02	0.1360609E 03	0.1625732E 03	56.816	8.117	0.100454	7	8.403
-0.6635963E 02	0.2034622E 03	0.2140105E 03	108.064	13.508	0.132238	8	9.604
0.3275945E 02	-0.8667317E 02	0.9265753E 02	290.705	32.301	0.057253	9	10.804
0.1658219E 03	0.4807513E 02	0.1726503E 03	16.168	1.617	0.106681	10	12.005

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 52 FLT 15.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.203632E 04

ZERO POSITION USED 1.15 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.7380359E 02							
0.3422605E 03	-0.8310394E 02	0.3522051E 03	346.352	346.352	0.350745	1	1.200
-0.1473450E 03	0.2752821E 02	0.1495496E 03	169.396	84.698	0.148979	2	2.401
-0.3049022E 03	0.1857648E 03	0.3565225E 03	148.598	49.533	0.355044	3	3.601
-0.4111652E 02	-0.8589511E 01	0.4200414E 02	191.800	47.950	0.041830	4	4.802
0.3365132E 03	-0.9460990E 03	0.1004164E 04	289.580	57.916	1.000000	5	6.002
0.2512747E 03	0.7104008E 02	0.2611238E 03	15.787	2.631	0.260041	6	7.203
0.7509656E 02	0.6929231E 02	0.1021808E 03	42.698	6.100	0.101757	7	8.403
-0.5334580E 01	0.1764018E 03	0.1764824E 03	91.732	11.467	0.175751	8	9.604
-0.6122873E 02	-0.4593295E 02	0.7654276E 02	216.877	24.097	0.076225	9	10.804
0.1139716E 03	0.5417200E 02	0.1261906E 03	25.422	2.542	0.125667	10	12.005

Table III. (Continued)

TEST 15 N = 11

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 53 FLT 15.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.648045E 04

ZERO POSITION USED 9.51 LOAD/IN USED -26400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1332054E 04							
-0.2518347E 04	0.4471398E 04	0.5131809E 04	119.389	119.389	1.000000	1	1.203
-0.1060650E 04	-0.2231380E 04	0.2470635E 04	244.577	122.288	0.481435	2	2.407
0.2599679E 04	0.1370540E 04	0.2938818E 04	27.798	9.266	0.572667	3	3.610
0.2820220E 03	0.6250522E 03	0.6857307E 03	65.715	16.429	0.133624	4	4.813
0.8316177E 02	0.3198770E 03	0.3305105E 03	75.427	15.085	0.064404	5	6.017
-0.8184727E 02	0.3922809E 02	0.9076239E 02	154.392	25.732	0.017686	6	7.220
-0.3053711E 02	0.3644726E 02	0.4990897E 02	128.459	18.351	0.009568	7	8.424
-0.5104321E 02	0.2315512E 02	0.5604970E 02	155.599	19.450	0.010922	8	9.627
-0.5416255E 02	-0.6086508E 01	0.5450346E 02	186.412	20.712	0.010621	9	10.830
0.2326056E 02	-0.1700555E 03	0.1716425E 03	277.797	27.780	0.033447	10	12.034

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 53 FLT 15.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.751598E 04

ZERO POSITION USED 3.75 LOAD/IN USED 25900.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1256021E 04							
-0.1854300E 04	0.3717948E 04	0.4154703E 04	116.507	116.507	1.000000	1	1.203
-0.8757666E 03	-0.1429844E 04	0.1676729E 04	238.513	119.256	0.403574	2	2.407
0.2815063E 04	0.1286835E 04	0.3095241E 04	24.566	8.189	0.744997	3	3.610
0.3002610E 03	0.7733757E 03	0.8296184E 03	68.781	17.195	0.199682	4	4.813
-0.3144231E 02	0.4041055E 03	0.4053267E 03	94.449	18.890	0.097558	5	6.017
-0.1516642E 03	0.1250293E 03	0.1965562E 03	140.498	23.416	0.047309	6	7.220
-0.1082029E 03	0.1287607E 03	0.1681879E 03	130.042	18.577	0.040481	7	8.424
-0.3065295E 02	0.5661195E 02	0.6437791E 02	118.434	14.804	0.015495	8	9.627
-0.4714465E 02	0.9098177E 02	0.1024710E 03	117.392	13.044	0.024664	9	10.830
0.7131226E 01	-0.3293945E 02	0.3370255E 02	282.216	28.222	0.008112	10	12.034

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 53 FLT 15.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.717072E 04

ZERO POSITION USED 8.27 LOAD/IN USED -30400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1075503E 04							
-0.1617719E 04	0.3520694E 04	0.3874571E 04	114.678	114.678	1.000000	1	1.203
-0.5257881E 03	-0.1204267E 04	0.1314044E 04	246.414	123.207	0.339146	2	2.407
0.2465621E 04	0.1602003E 04	0.2940357E 04	33.013	11.004	0.758886	3	3.610
0.1188335E 03	0.8387681E 03	0.8471440E 03	81.936	20.484	0.218642	4	4.813
-0.8162611E 01	0.4779268E 03	0.4779963E 03	90.979	18.196	0.123368	5	6.017
-0.1283698E 03	0.1538432E 03	0.2003788E 03	129.847	21.641	0.051716	6	7.220
-0.1669962E 03	-0.6192491E 00	0.1669973E 03	180.212	25.745	0.043101	7	8.424
-0.5969607E 02	0.3633075E 00	0.5969930E 02	179.632	22.454	0.015408	8	9.627
-0.3791208E 02	0.1253702E 03	0.1309772E 03	106.825	11.869	0.033804	9	10.830
-0.8152909E 01	-0.1641092E 03	0.1643715E 03	267.157	26.716	0.042423	10	12.034

Table III. (Continued)

TEST 15 N = 11 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 53 FLT 15.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.197626E 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.7659526E 03							
-0.7995963E 02	0.1871664E 03	0.2035309E 03	113.133	113.133	0.195231	1	1.203
-0.8835291E 02	-0.1652778E 03	0.1874112E 03	241.872	120.936	0.179769	2	2.407
0.9492402E 03	0.4310220E 03	0.1042514E 04	24.421	8.140	1.000000	3	3.610
0.1111220E 03	0.3514294E 03	0.3685793E 03	72.453	18.113	0.353549	4	4.813
0.6650189E 02	0.1528463E 03	0.1666886E 03	66.487	13.297	0.159891	5	6.017
-0.4438860E 02	-0.1853125E 02	0.4810150E 02	202.659	33.777	0.046140	6	7.220
0.1131900E 03	0.1160475E 01	0.1131960E 03	0.587	0.084	0.108580	7	8.424
0.1043152E 03	0.9845300E 02	0.1434386E 03	43.344	5.418	0.137589	8	9.627
0.8787950E 02	0.1339579E 03	0.1602109E 03	56.734	6.304	0.153677	9	10.830
-0.1124462E 03	0.2242818E 03	0.2508914E 03	116.627	11.663	0.240660	10	12.034

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 53 FLT 15.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.305571E 04

ZERO POSITION USED 3.11 LOAD/IN USED -20300.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.1617401E 04							
0.7080020E 03	-0.1975397E 03	0.7350432E 03	344.410	344.410	0.523204	1	1.203
-0.1758618E 03	-0.2616467E 03	0.3152559E 03	236.094	118.047	0.224399	2	2.407
-0.6010740E 03	-0.1357665E 03	0.6162161E 03	192.728	64.243	0.438623	3	3.610
-0.2151881E 02	0.6802141E 02	0.7134383E 02	107.555	26.889	0.050783	4	4.813
0.1507117E 03	-0.1396780E 04	0.1404887E 04	276.158	55.232	1.000000	5	6.017
0.5388647E 03	0.2598369E 03	0.5982395E 03	25.743	4.291	0.425827	6	7.220
0.3145591E 03	0.1532606E 03	0.3499089E 03	25.976	3.711	0.249065	7	8.424
-0.2313728E 03	-0.2091684E 03	0.3119050E 03	222.115	27.764	0.222014	8	9.627
-0.1576762E 02	-0.1076718E 03	0.1088201E 03	261.668	29.074	0.077458	9	10.830
0.1384607E 03	0.1330105E 03	0.1919978E 03	43.850	4.385	0.136664	10	12.034

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 53 FLT 15.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.228771E 04

ZERO POSITION USED 1.15 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.5154578E 02							
0.3381553E 03	0.1236350E 02	0.3383811E 03	2.094	2.094	0.441382	1	1.203
0.3358161E 01	-0.1279312E 03	0.1279753E 03	271.504	135.752	0.166930	2	2.407
-0.3905647E 03	-0.4496854E 02	0.3931448E 03	186.568	62.189	0.512816	3	3.610
0.3372581E 02	0.2173717E 02	0.4012399E 02	32.803	8.201	0.052337	4	4.813
-0.3269145E 02	-0.7659424E 03	0.7666396E 03	267.556	53.511	1.000000	5	6.017
0.2948596E 03	0.1283180E 03	0.3215706E 03	23.518	3.920	0.419455	6	7.220
0.2593083E 03	0.1268511E 03	0.2886729E 03	26.067	3.724	0.376543	7	8.424
-0.1841598E 03	-0.5753677E 02	0.1929386E 03	197.350	24.669	0.251668	8	9.627
-0.1960191E 02	-0.6200938E 02	0.6503383E 02	252.458	28.051	0.084830	9	10.830
0.1590140E 03	0.7306401E 02	0.1749966E 03	24.678	2.468	0.228264	10	12.034

Table III. (Continued)

TEST 16 N = 1

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 56 FLT 16.0 TR 5 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.395532E 04

ZERO POSITION USED 9.51 LOAD/IN USED -26400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1228516E 04							
-0.1476194E 04	0.1080751E 04	0.1831964E 04	143.846	143.846	0.501495	1	0.554
0.1450472E 04	0.1403974E 04	0.2018566E 04	44.067	22.033	0.552604	2	1.108
0.6787061E 02	-0.1214255E 04	0.1216151E 04	273.199	91.066	0.332918	3	1.662
0.1351226E 04	-0.1438411E 04	0.1973534E 04	313.210	78.302	0.540250	4	2.216
-0.2590597E 04	-0.2585528E 04	0.3653003E 04	225.055	45.011	1.000000	5	2.770
-0.2004965E 04	0.1945355E 04	0.2793561E 04	135.662	22.944	0.764730	6	3.324
-0.4581917E 03	-0.7450735E 02	0.4642106E 03	189.736	27.034	0.127076	7	3.878
-0.2417012E 03	-0.2078416E 03	0.3187751E 03	220.693	27.587	0.087264	8	4.432
-0.6581456E 02	-0.1224174E 03	0.1369877E 03	241.736	26.960	0.038048	9	4.986
0.5668559E 02	-0.1197123E 03	0.1324549E 03	295.338	29.534	0.036259	10	5.540

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 56 FLT 16.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.987715E 04

ZERO POSITION USED 3.75 LOAD/IN USED 25900.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2119749E 04							
-0.1188447E 04	0.4366001E 03	0.1266106E 04	159.828	159.828	0.367271	1	0.554
0.1705754E 04	0.1714907E 04	0.2418781E 04	45.153	22.577	0.701639	2	1.108
-0.5217852E 03	-0.1208141E 04	0.1316003E 04	246.641	82.214	0.381746	3	1.662
0.1745087E 04	-0.1694659E 04	0.2425572E 04	316.009	79.002	0.703609	4	2.216
-0.3220071E 04	-0.1230946E 04	0.3447336E 04	200.920	40.184	1.000000	5	2.770
-0.1449746E 04	0.2318337E 04	0.2734305E 04	122.019	20.337	0.793167	6	3.324
-0.3196965E 03	-0.1469539E 03	0.3518540E 03	204.687	29.241	0.102066	7	3.878
-0.1467892E 03	-0.2075191E 03	0.2541874E 03	234.726	29.341	0.073735	8	4.432
0.1082829E 03	-0.8453624E 02	0.1373736E 03	322.021	35.780	0.039849	9	4.986
0.1847318E 02	-0.4182999E 02	0.4572751E 02	293.627	29.383	0.013265	10	5.540

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 56 FLT 16.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.491521E 04

ZERO POSITION USED 8.27 LOAD/IN USED -30400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1264559E 04							
-0.1172255E 04	0.4485146E 03	0.1255129E 04	159.063	159.063	0.401818	1	0.554
0.1664653E 04	0.1507270E 04	0.2245620E 04	42.159	21.079	0.718914	2	1.108
-0.3260053E 03	-0.1098777E 04	0.1146375E 04	253.431	84.477	0.367001	3	1.662
0.1386106E 04	-0.1758165E 04	0.2238846E 04	308.251	77.063	0.716745	4	2.216
-0.2678316E 04	-0.1607381E 04	0.3123626E 04	210.970	42.194	1.000000	5	2.770
-0.1716301E 04	0.1652504E 04	0.2382532E 04	136.085	22.681	0.762745	6	3.324
-0.4173403E 03	-0.2870085E 03	0.5065044E 03	214.517	30.645	0.162153	7	3.878
-0.2135275E 03	-0.4276436E 03	0.4779885E 03	243.466	30.433	0.153023	8	4.432
0.6260384E 02	-0.2349061E 03	0.2431052E 03	284.923	31.658	0.077828	9	4.986
0.5712668E 02	-0.1297458E 03	0.1408535E 03	293.627	29.393	0.045093	10	5.540

Table III. (Continued)

TEST 16 N = 1 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 56 FLT 16.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.287655E 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.7195947E 03							
-0.1486166E 02	-0.5445127E 03	0.5447153E 03	268.436	268.436	0.429360	1	0.554
0.5334785E 03	0.5153773E 03	0.7457825E 03	43.778	21.889	0.587847	2	1.108
-0.2615581E 03	-0.1994227E 03	0.3289104E 03	217.323	72.441	0.259257	3	1.662
0.5472222E 03	-0.4701477E 03	0.7214504E 03	319.332	79.833	0.568668	4	2.216
-0.1134224E 04	-0.4291867E 03	0.1268567E 04	199.725	39.945	1.000000	5	2.770
-0.4857456E 03	0.9552065E 03	0.1071615E 04	116.954	19.492	0.844682	6	3.324
-0.1566033E 03	-0.8762337E 02	0.2145152E 03	204.109	29.158	0.169087	7	3.878
-0.4048825E 02	-0.5785055E 02	0.7061172E 02	235.013	29.377	0.055658	8	4.432
0.7985172E 02	-0.7586995E 02	0.1101477E 03	316.465	35.163	0.086822	9	4.986
0.1066901E 01	-0.6073771E 01	0.6166762E 01	279.963	27.996	0.004861	10	5.540

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 56 FLT 16.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.214215E 04

ZERO POSITION USED 3.11 LOAD/IN USED -20300.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.8139849E 03							
0.6346199E 03	-0.1985380E 03	0.6649505E 03	342.628	342.628	1.000000	1	0.554
-0.3702144E 03	-0.4803198E 03	0.6064376E 03	232.376	116.188	0.912003	2	1.108
-0.3078609E 03	0.2788396E 03	0.4153665E 03	137.832	45.944	0.624658	3	1.662
-0.1274056E 03	0.2901230E 03	0.3168652E 03	113.708	28.427	0.476524	4	2.216
0.5115172E 03	-0.2413419E 03	0.5659951E 03	334.759	66.952	0.851123	5	2.770
0.3451042E 03	-0.2062296E 03	0.4020286E 03	329.138	54.856	0.604599	6	3.324
-0.3993817E 02	0.1559534E 03	0.1609861E 03	104.364	14.909	0.242102	7	3.878
0.1893436E 03	-0.2453435E 03	0.3099104E 03	307.659	38.457	0.466065	8	4.432
0.1245820E 03	-0.1274705E 03	0.1782397E 03	314.343	34.927	0.268049	9	4.986
-0.2246013E 03	0.3893850E 01	0.2246351E 03	179.007	17.901	0.337822	10	5.540

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 56 FLT 16.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.150838E 04

ZERO POSITION USED 1.15 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.8262769E 03							
0.3051005E 03	-0.6807904E 02	0.3126036E 03	347.421	347.421	0.835365	1	0.554
-0.1869415E 03	-0.3241721E 03	0.3742122E 03	240.029	120.013	1.000000	2	1.108
-0.1528713E 03	0.1418225E 03	0.2085264E 03	137.147	45.716	0.557241	3	1.662
-0.1050728E 03	0.1666381E 03	0.1991611E 03	123.207	30.802	0.532214	4	2.216
0.2820168E 03	-0.6399527E 02	0.2891865E 03	347.215	69.443	0.772788	5	2.770
0.2361307E 03	-0.1793969E 03	0.2965483E 03	322.775	53.796	0.792460	6	3.324
-0.2375253E 01	0.1251986E 03	0.1252211E 03	91.087	13.012	0.334626	7	3.878
0.6298962E 02	-0.1457990E 03	0.2056911E 03	287.833	35.979	0.549539	8	4.432
0.4319899E 01	-0.9177306E 02	0.9187466E 02	272.695	30.299	0.245515	9	4.986
-0.7463557E 02	0.5303326E 02	0.9155369E 02	144.604	14.460	0.244671	10	5.540

Table III. (Continued)

TEST 16 N = 2

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 58 FLT 16.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.729236E 04

ZERO POSITION USED 9.51 LOAD/IN USED -26400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.4994662E 03							
-0.2829158E 04	0.3469380E 04	0.4476688E 04	129.196	129.196	1.000000	1	0.654
0.4975132E 03	-0.6815706E 03	0.8379785E 03	305.575	152.788	0.187187	2	1.308
0.1225742E 04	-0.1093957E 03	0.1230614E 04	354.900	118.300	0.274894	3	1.962
0.1229977E 04	-0.2163703E 04	0.2488456E 04	299.595	74.899	0.555869	4	2.616
0.5998547E 03	-0.3588052E 03	0.6989756E 03	329.114	65.823	0.156137	5	3.270
-0.7666559E 02	0.1503504E 03	0.1693503E 03	117.031	19.505	0.037829	6	3.924
-0.1545186E 02	0.7237114E 02	0.7400227E 02	102.052	14.579	0.016531	7	4.578
-0.7713199E 02	-0.5847574E 02	0.9679236E 02	217.167	27.146	0.021621	8	5.232
-0.8564182E 02	-0.8574207E 02	0.1240458E 03	223.726	24.858	0.027709	9	5.886
0.2573983E 01	0.3660394E 02	0.3669434E 02	85.978	8.598	0.008197	10	6.540

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 58 FLT 16.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.570733E 04

ZERO POSITION USED 3.75 LOAD/IN USED 25900.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.8870327E 03							
-0.2003774E 04	0.1988837E 04	0.2827484E 04	135.300	135.300	1.000000	1	0.654
0.8796921E 03	0.3110879E 03	0.9330776E 03	19.475	9.738	0.330003	2	1.308
0.4722607E 03	-0.5914016E 03	0.7568262E 03	308.609	102.870	0.267668	3	1.962
0.2134793E 04	-0.1214909E 04	0.2456281E 04	330.356	82.589	0.868718	4	2.616
0.7094434E 03	-0.3375035E 03	0.1175694E 04	307.115	61.423	0.415804	5	3.270
-0.5130427E 03	0.6493354E 02	0.5171355E 03	172.787	28.798	0.182896	6	3.924
-0.9545941E 02	-0.1630873E 03	0.1889706E 03	239.658	34.237	0.066834	7	4.578
-0.5059308E 02	-0.6653852E 02	0.8358853E 02	232.752	29.094	0.029563	8	5.232
-0.1301786E 02	-0.2770957E 02	0.3061516E 02	244.836	27.204	0.010828	9	5.886
-0.4593762E 02	-0.7728949E 02	0.8991066E 02	239.275	23.927	0.031799	10	6.540

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 58 FLT 16.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.514215E 04

ZERO POSITION USED 8.27 LOAD/IN USED -30400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1054303E 02							
-0.2166670E 04	0.1781850E 04	0.2807571E 04	140.605	140.605	1.000000	1	0.654
0.9122915E 03	0.1335030E 03	0.9228966E 03	8.694	4.347	0.328717	2	1.308
0.4158962E 03	-0.4299722E 03	0.5981951E 03	314.046	104.682	0.213065	3	1.962
0.1848035E 04	-0.1602132E 04	0.2445925E 04	319.077	79.769	0.871153	4	2.616
0.9993333E 03	-0.6637070E 03	0.1167531E 04	328.863	65.773	0.415851	5	3.270
-0.1561432E 03	0.2313971E 03	0.2791511E 03	124.011	20.668	0.099428	6	3.924
-0.4145459E 02	-0.3734156E 02	0.5579335E 02	222.012	31.716	0.019872	7	4.578
0.3915118E 02	0.6181836E 02	0.7317325E 02	57.653	7.207	0.026063	8	5.232
-0.4210857E 02	0.3527272E 02	0.5492992E 02	140.048	15.561	0.019565	9	5.886
-0.5073149E 02	0.9897152E 00	0.5074112E 02	178.883	17.886	0.019073	10	6.540

Table III. (Continued)

TEST 16 N = 2 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 58 FLT 16.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.1493175 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.3213369E 03							
-0.1636034E 03	-0.6007530E 02	0.1742846E 03	200.163	200.163	0.232945	1	0.654
0.3712512E 03	0.2156029E 03	0.4293186E 03	30.146	15.073	0.573817	2	1.308
-0.1626190E 02	-0.5942663E 02	0.6161137E 02	254.696	84.899	0.082348	3	1.962
0.6515591E 03	-0.3677581E 03	0.7491797E 03	330.559	82.640	1.000000	4	2.616
0.2554404E 03	-0.3782813E 03	0.4565059E 03	304.040	60.808	0.610155	5	3.270
-0.1480285E 03	0.5578549E 02	0.1591912E 03	159.351	26.558	0.211435	6	3.924
0.2882730E 01	-0.1075276E 03	0.1075662E 03	271.536	38.791	0.143770	7	4.578
-0.6105932E 02	0.2493802E 02	0.6595466E 02	157.783	19.723	0.088153	8	5.232
0.3301277E 02	0.3994145E 02	0.5181856E 02	50.425	5.603	0.069259	9	5.886
-0.1329976E 02	-0.1140604E 02	0.1752087E 02	220.617	22.062	0.023418	10	6.540

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 58 FLT 16.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.2047645 04

ZERO POSITION USED 3.11 LOAD/IN USED -20300.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.8995710E 03							
0.7763784E 03	-0.2164371E 03	0.8059829E 03	344.423	344.423	1.000000	1	0.654
-0.2987437E 03	-0.1479251E 03	0.3333611E 03	206.343	103.171	0.413608	2	1.308
-0.3029119E 03	0.2558949E 03	0.3965326E 03	139.809	46.603	0.491986	3	1.962
-0.3345176E 03	0.6738525E 02	0.3412371E 03	168.611	42.153	0.423380	4	2.616
0.2169743E 03	0.2256032E 03	0.3130096E 03	46.117	9.223	0.388357	5	3.270
0.5142857E 02	-0.7805804E 02	0.9347701E 02	303.379	50.563	0.115979	6	3.924
0.2562238E 02	0.6607743E 01	0.2646059E 02	14.461	2.066	0.032830	7	4.578
0.2136452E 03	0.1955339E 03	0.2896165E 03	42.466	5.308	0.359333	8	5.232
0.1948854E 02	0.2608805E 03	0.2615406E 03	85.946	9.550	0.324499	9	5.886
0.2420631E 03	0.3266299E 03	0.4065483E 03	53.458	5.346	0.504413	10	6.540

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 58 FLT 16.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.1432768 04

ZERO POSITION USED 1.15 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.6940688E 03							
0.3510664E 03	-0.9857774E 02	0.3646436E 03	344.315	344.315	1.000000	1	0.654
-0.1131466E 03	-0.9769298E 02	0.1494966E 03	220.808	110.404	0.409951	2	1.308
-0.1158069E 03	0.1362318E 03	0.1788025E 03	130.367	43.456	0.490348	3	1.962
-0.1870614E 03	0.3394325E 02	0.1901116E 03	169.715	42.429	0.521375	4	2.616
0.1017429E 03	0.1245422E 03	0.1508176E 03	50.753	10.151	0.441027	5	3.270
0.3921576E 02	-0.6139194E 02	0.7289966E 02	302.574	50.429	0.199756	6	3.924
0.4229413E 02	0.6949374E 01	0.4286125E 02	9.331	1.333	0.117543	7	4.578
0.1445707E 03	0.1152751E 03	0.1849034E 03	38.568	4.821	0.507080	8	5.232
0.2625360E 02	0.1661945E 03	0.1682554E 03	81.023	9.003	0.461424	9	5.886
0.1935227E 03	0.1836079E 03	0.2667637E 03	43.494	4.349	0.731573	10	6.540

Table III. (Continued)

TEST 16 N = 3

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 59 FLT 16.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = C.E07C76E C4

ZERO POSITION USED 9.51 LCAD/IN LSED -26400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.38414C6E C3							
-0.3325139E 04	0.4243565E 04	0.5391457E 04	128.079	128.079	1.000000	1	0.662
-0.1193532E C3	-0.1419305E 04	0.1424321E 04	265.191	132.596	0.264181	2	1.325
0.1615586E 04	-0.1531237E 03	0.1622826E 04	354.586	118.195	0.300599	3	1.987
0.5249315E C3	-C.2142578E 04	0.2205947E 04	283.766	70.942	C.409156	4	2.649
0.8152559E 03	0.2596318E 03	C.8686118E 03	20.179	4.036	C.161109	5	3.311
-0.6505414E 02	0.3851489E 03	C.3906042E 03	99.587	16.598	C.072449	6	3.974
-0.8778C27E 02	0.1C04052E 03	0.1333663E 03	131.162	18.737	C.024737	7	4.636
-0.1472232E 03	0.ECIC749E 01	0.1474410E 03	176.885	22.111	C.027347	8	5.298
-0.5174310E 02	0.5774728E 02	0.7753769E 02	131.861	14.651	C.014382	9	5.960
-0.2747859E 02	0.3316850E 02	0.4307260E 02	129.640	12.964	C.007589	10	6.623

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 59 FLT 16.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.506425E C4

ZERO POSITION USED 3.75 LCAD/IN LSED 25900.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.1208544E 02							
-0.2442521E 04	0.2818880E 04	0.3729878E 04	130.909	130.909	1.000000	1	0.662
-0.1114SC7E 03	-0.5712666E 03	0.5820444E 03	258.957	129.478	0.156C49	2	1.325
0.1013689E 04	-0.7776670E 03	0.1277627E 04	322.506	107.502	C.342535	3	1.987
0.1104527E 04	-0.5856758E 03	0.1252077E 04	331.903	82.976	0.335688	4	2.649
0.1082761E 04	-0.2802293E 03	C.1119386E 04	345.500	69.100	C.299E45	5	3.311
-0.2254363E 03	0.1703444E 03	0.2825574E 03	142.925	23.821	C.075755	6	3.974
0.9556119E 02	-0.9376588E 02	0.1338805E 03	315.543	45.078	C.035894	7	4.636
-0.9737651E 02	-0.7230951E 02	0.1212883E 03	216.597	27.075	C.032518	8	5.298
-0.2689546E C2	-0.6514307E 02	0.7047681E 02	247.566	27.507	C.018895	9	5.960
0.2997670E 02	-0.1146484E 02	0.3209618E 02	339.071	33.907	C.008605	10	6.623

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 59 FLT 16.0 TR 11 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = C.589656E C4

ZERO POSITION USED 8.27 LCAD/IN LSED -30400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.4473610E 02							
-0.2366569E 04	0.2676517E 04	0.3923222E 04	136.942	136.942	1.000000	1	0.662
-0.1657883E 03	-0.1C81190E 04	0.1093926E 04	261.282	130.641	0.278808	2	1.325
0.1320417E 04	-0.4886167E 03	C.1407923E 04	339.693	113.231	C.358669	3	1.987
0.1238450E 04	-0.1611581E 04	0.2032474E 04	307.541	76.885	C.518C62	4	2.649
0.3815723E 03	0.61C8240E 02	0.3864304E 03	9.095	1.819	C.098498	5	3.311
-0.1416353E 03	-0.1325380E 02	0.1422540E 03	185.346	3C.891	C.036259	6	3.974
0.1415C44E 03	-0.5C24268E 01	0.1415936E 03	357.966	51.138	C.036C91	7	4.636
-0.3619523E 02	0.2852170E 02	0.4608548E 02	141.765	17.721	C.011747	8	5.298
-0.9454074E 01	-0.3400916E C2	0.3529875E 02	254.465	2E.274	C.008597	9	5.960
0.1538766E 02	-0.2655150E 02	0.3068823E 02	300.094	30.009	0.007622	10	6.623

Table III. (Continued)

TEST 16 N = 3 (CONTINUED)

HARMONIC ANALYSIS MODEL CL87C5 SHIP 33 T 010 CTR 59 FLT 16.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = C.111588E C4

ZERO POSITION USED 0.39 LCAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2715901E 03							
-0.3463447E C3	0.1E45916E 03	0.3924648E 03	151.944	151.944	C.876C92	1	0.662
0.3509564E 01	-0.544469CE 02	0.5455989E 02	273.688	136.844	0.121793	2	1.325
0.1778314E 03	-0.1716396E 03	0.2471522E 03	316.015	105.338	C.551714	3	1.987
0.3280C34E 03	-0.1492548E 03	C.3603652E 03	335.532	83.883	C.804437	4	2.649
0.4131492E C3	-0.1731664E 03	0.4479719E 03	337.260	67.452	1.000C00	5	3.311
-0.7112E19E 02	0.7715775E 02	0.1C49700E 03	132.657	22.109	C.234323	6	3.974
0.3462350E 02	-0.1316185E C3	0.1360963E 03	284.738	40.677	C.303E05	7	4.636
-0.1046224E C1	-0.2216069E 02	0.2320428E 02	267.416	33.427	C.051799	8	5.298
0.3798E31E 02	0.3504111E 02	0.5447171E 02	45.785	5.087	C.121596	9	5.960
0.4539450E C2	-0.39C8E2E 01	0.4552097E C2	355.728	35.573	C.101616	10	6.623

HARMONIC ANALYSIS MODEL CL87C5 SHIP 33 T 010 CTR 59 FLT 16.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = C.233115E C4

ZERO POSITION USED 3.11 LCAD/IN USED -20300.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.4516E53E C3							
0.6481621E 03	-0.2331419E 03	0.6888171E 03	340.216	340.216	1.000C00	1	0.662
-0.2708E94E 03	-0.1EEE761E 03	0.3301042E 03	214.859	107.430	C.479233	2	1.325
-0.2807C58E 03	0.1163456E 03	0.3038618E 03	157.497	52.496	C.441136	3	1.987
-0.2559920E C3	-0.1525171E 01	0.2559965E 03	180.342	45.086	C.371647	4	2.649
0.3965256E 02	0.1438622E 03	0.1492268E 03	74.590	14.918	C.216642	5	3.311
0.9357E17E 02	-0.5524434E 01	0.9406161E 02	354.188	59.031	C.136555	6	3.974
0.1377723E 03	-0.2642483E 00	0.1377726E 03	359.890	51.413	C.200C13	7	4.636
-0.4894238E 03	0.3C91685E 03	0.5789048E 03	147.720	18.465	C.840433	8	5.298
-0.1353271E C3	-0.465C771E 03	0.4843657E 03	253.776	28.197	C.703185	9	5.960
-0.6314502E 02	0.8127077E 02	0.1029186E 03	127.846	12.785	C.149413	10	6.623

HARMONIC ANALYSIS MODEL CL87C5 SHIP 33 T 010 CTR 59 FLT 16.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.158380E C4

ZERO POSITION USED 1.15 LCAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.7672747E 03							
0.3101345E 03	-0.6330072E 02	0.3165286E 03	348.464	348.464	C.919135	1	0.662
-0.7370C20E 02	-0.4683893E 02	0.8732469E 02	212.437	106.219	0.253573	2	1.325
-0.1534506E 03	0.1423094E 03	0.2092823E 03	137.157	45.719	C.607714	3	1.987
-0.1309735E 03	-0.483E017E 02	0.1396234E 03	200.274	50.068	C.405438	4	2.649
-0.4130556E 02	0.1281117E 03	0.1346109E 03	107.870	21.574	C.39CE83	5	3.311
0.1166127E 02	-0.8987406E 01	0.1472272E 02	322.378	53.730	C.042752	6	3.974
0.3104C66E 02	-0.1C32267E 03	0.1077927E 03	286.736	40.962	C.313C08	7	4.636
-0.2631296E C3	0.2221663E 03	0.3443765E 03	139.825	17.478	1.000C00	8	5.298
0.6046C47E 01	-0.3C79968E 03	0.3080559E 03	271.125	30.125	C.894532	9	5.960
-0.5880290E 02	0.4932196E 02	0.7674024E 02	140.011	14.001	0.222864	10	6.623

Table III. (Continued)

TEST 16 N = 4

HARMONIC ANALYSIS MODEL CL87C5 SHIP 33 T 010 CTR 60 FLT 16.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = C.815271E C4

ZERO POSITION USED 9.51 LOAD/IN USED -26400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.7765C12E 03							
-0.3769283E 04	0.4C7E9C1E 04	0.5553820E 04	132.741	132.741	1.000C00	1	0.653
-0.7654C52E 03	-0.2312115E 04	0.2435513E 04	251.683	125.842	C.438529	2	1.305
0.1970193E 04	0.4[illegible]C5C9E 02	0.1970746E 04	1.358	C.453	C.354E45	3	1.958
0.6820449E 03	-0.1617874E 04	0.1755762E 04	292.859	73.215	C.316136	4	2.611
-0.2564EC9E 03	0.3C16C99E 03	0.3959048E 03	130.375	26.075	C.071285	5	3.264
-0.5080703E 03	0.1548265E 03	0.5311372E 03	163.052	27.175	C.095E35	6	3.916
-0.1383254E 03	-0.2206874E 03	0.2689807E 03	239.052	34.150	C.048432	7	4.569
-0.2950[illegible]C9E 02	-0.5716434E 02	0.6434702E 02	242.709	30.339	C.011586	8	5.222
0.5361C55E 02	-0.1154303E 03	0.1272723E 03	294.912	32.768	C.022916	9	5.875
0.7840933E 02	-0.5[illegible]58S2E 02	0.9780319E 02	323.293	32.329	C.017610	10	6.527

HARMONIC ANALYSIS MODEL CL87C5 SHIP 33 T 010 CTR 60 FLT 16.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = C.695325E C4

ZERO POSITION USED 3.75 LOAD/IN USED 25900.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.5768276E 03							
-0.3461182E 04	0.3621411E 04	0.5009430E 04	133.704	133.704	1.000000	1	0.653
-0.7597771E 03	-0.2027363E 04	0.2165054E 04	249.456	124.728	C.432196	2	1.305
0.1869534E 04	-0.1348485E 03	0.1874790E 04	355.875	118.625	C.374252	3	1.958
0.8737[illegible]C5E 03	-0.1181854E 04	0.1469768E 04	306.476	76.619	C.293400	4	2.611
-0.1859[illegible]56E 02	0.2955137E 03	0.2960981E 03	93.601	18.720	C.059108	5	3.264
-0.4590166E 03	0.2447207E 03	0.5201772E 03	151.936	25.323	C.103E40	6	3.916
-0.1098616E 03	-0.1975758E 03	0.2260659E 03	240.924	34.418	C.045128	7	4.569
-0.6959766E 02	-0.5456978E 02	0.8844032E 02	218.099	27.262	C.017655	8	5.222
-0.[illegible]767[illegible]52E 02	-0.4C16647E 02	0.1056155E 03	202.353	22.484	C.021083	9	5.875
-0.1163723E 01	-0.7594156E 02	0.7595044E 02	269.122	26.912	C.015161	10	6.527

HARMONIC ANALYSIS MODEL CL87C5 SHIP 33 T 010 CTR 60 FLT 16.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = C.721789E C4

ZERO POSITION USED 8.27 LOAD/IN USED -30400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.7725725E 03							
-0.3293781E 04	0.3276288E 04	0.4645758E 04	135.153	135.153	1.000C00	1	0.653
-0.3885469E 03	-0.2C48842E 04	0.2065358E 04	259.262	129.631	C.44EE74	2	1.305
0.1790[illegible]C4E 04	0.5C3107CE 01	0.1790711E 04	0.161	0.054	C.385451	3	1.958
0.1205230E 04	-0.1724443E 04	0.2103873E 04	304.950	76.237	C.452859	4	2.611
-0.8442E64E 02	0.4515695E 02	0.9769472E 02	149.790	29.958	C.021029	5	3.264
-0.3257371E 03	0.3C54255E 03	0.4465303E 03	136.843	22.807	C.096116	6	3.916
-0.5191707E 02	-0.1606177E 02	0.5434485E 02	197.191	28.170	C.011698	7	4.569
-0.6572E82E 02	-0.4[illegible]7C941E 02	0.8121700E 02	215.975	26.997	C.017482	8	5.222
0.2165E57E 02	0.2E5289CE 02	0.3581886E 02	52.795	5.866	C.007710	9	5.875
0.3846379E 02	-0.[illegible]56C069E 02	0.7604544E 02	300.385	30.038	C.016369	10	6.527

Table III. (Continued)

TEST 16 N = 4 (CONTINUED)

HARMONIC ANALYSIS MODEL CL87C5 SHIP 33 T 010 CTR 60 FLT 16.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = C.147121E C4

ZERO POSITION USED 0.39 LCAD/IN LSED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.17982C6E 02							
-0.5845327E C3	0.3556335E 03	0.6843215E 03	148.669	148.669	1.000C00	1	0.653
-0.1137524E 03	-0.4337515E C3	0.4484294E 03	255.300	127.650	C.655291	2	1.305
0.4113269E 03	-C.1902754E C2	0.4131743E 03	354.580	118.193	C.603772	3	1.958
0.2048479E 03	-0.3546265E 03	0.4448928E 03	297.416	74.354	C.650122	4	2.611
0.8748833E 01	0.6736078E C2	0.6795627E 02	82.603	16.521	C.099305	5	3.264
-0.1371358E 03	0.1142758E 03	0.1785113E 03	140.196	23.366	C.260859	6	3.916
-0.3765851E 02	-0.9614914E 02	0.1032609E 03	248.611	35.516	C.150E95	7	4.569
-0.4652944E 01	-0.5124338E 02	0.5145419E 02	264.812	33.101	C.075190	8	5.222
0.3897227E 02	-0.2651786E C2	0.4736464E 02	325.367	36.152	C.069214	9	5.875
0.1652220E 02	-0.3985272E 02	0.4314189E 02	292.518	29.252	C.063C43	10	6.527

HARMONIC ANALYSIS MODEL CL870S SHIP 33 T 010 CTR 60 FLT 16.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = C.270915E C4

ZERO POSITION USED 3.11 LCAD/IN LSED -20300.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.5239167E 03							
0.8154390E 03	-0.2795286E 03	0.8620190E 03	341.078	341.078	1.000C00	1	0.653
-0.9866379E 02	C.6C4E177E 02	0.1157263E 03	148.491	74.246	0.134250	2	1.305
-0.4008777E 03	0.5267192E 02	0.4114497E 03	166.983	55.661	C.477309	3	1.958
-0.1265703E 03	0.8E05446E 02	0.1541870E 03	145.174	36.293	C.178E67	4	2.611
0.9982866E 02	-0.3617953E 02	0.1061825E 03	340.079	68.016	C.123179	5	3.264
0.2309433E 02	-0.3737756E C2	0.4393666E 02	301.710	50.285	C.05C969	6	3.916
-0.9854887E 02	-0.3465725E 03	0.3603115E 03	254.127	36.304	C.417586	7	4.569
0.4700564E 03	0.3443345E 03	0.5826829E 03	36.224	4.528	C.675551	8	5.222
-0.7629255E 03	-0.242C041E 02	0.7633093E 03	181.817	20.202	C.885490	9	5.875
0.3218213E 03	0.3765547E 03	0.4953472E 03	49.480	4.948	0.574636	10	6.527

HARMONIC ANALYSIS MODEL CL870S SHIP 33 T 010 CTR 60 FLT 16.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = C.170549E C4

ZERO POSITION USED 1.15 LCAD/IN LSED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.7627476E 03							
0.3473259E 03	-0.133263CE 03	0.3720137E 03	339.009	339.009	0.796395	1	0.653
0.2045157E 02	0.1C1C762E 03	0.1031245E 03	78.561	39.281	C.220766	2	1.305
-0.2141542E 03	0.E704904E 02	0.2311699E 03	157.879	52.626	C.494E81	3	1.958
-0.3338261E 02	0.5E46332E 02	0.6732277E 02	119.726	29.932	C.144122	4	2.611
0.3560460E 02	-0.2E15097E 02	0.4538904E 02	321.668	64.334	C.097167	5	3.264
0.7002354E 02	-0.231C429E 02	0.7373668E 02	341.740	56.957	C.157853	6	3.916
-0.5601349E 02	-0.2196064E 03	0.2266374E 03	255.691	36.527	C.485178	7	4.569
0.3002E22E 03	0.1575648E 03	0.3594456E 03	33.342	4.168	C.769490	8	5.222
-0.4586524E 03	0.EE3411SE 02	0.4671218E 03	169.099	18.789	1.000C00	9	5.875
0.1999551E 03	0.2383765E 03	0.3111614E 03	50.004	5.000	0.666125	10	6.527

Table III. (Continued)

TEST 16 N = 5

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 61 FLT 16.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.626816E 04

ZERO POSITION USED 9.51 LOAD/IN USED -26400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.6284199E 03							
-0.2038158E 04	0.2379785E 04	0.3133283E 04	130.578	130.578	1.000000	1	0.644
0.9909556E 03	0.2689312E 03	0.1026799E 04	15.184	7.592	0.327707	2	1.288
0.8830085E 03	-0.6701172E 03	0.1108495E 04	322.805	107.602	0.353781	3	1.932
0.1283445E 04	-0.1859602E 03	0.1296847E 04	351.756	87.939	0.413894	4	2.576
0.1655658E 04	-0.1703018E 04	0.2518677E 04	317.456	63.491	0.803846	5	3.220
-0.1775270E 03	-0.1524020E 03	0.2339705E 03	220.645	36.774	0.074673	6	3.863
-0.8493793E 02	-0.1597121E 03	0.1808934E 03	241.995	34.571	0.057733	7	4.507
-0.1512852E 03	-0.1697682E 03	0.2273949E 03	228.295	28.537	0.072574	8	5.151
-0.6242474E 02	-0.9218321E 02	0.1113310E 03	235.895	26.211	0.035532	9	5.795
0.4758171E 02	-0.5701160E 02	0.7425661E 02	309.848	30.985	0.023700	10	6.439

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 61 FLT 16.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.570732E 04

ZERO POSITION USED 3.75 LOAD/IN USED 25900.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1223698E 04							
-0.1596030E 04	0.8940303E 03	0.1829372E 04	150.744	150.744	0.867349	1	0.644
0.1439208E 04	0.8602815E 03	0.1676724E 04	30.869	15.434	0.794975	2	1.288
0.8430002E 02	-0.8616321E 03	0.8657461E 03	275.588	91.863	0.410471	3	1.932
0.1860857E 04	-0.7374829E 03	0.2001667E 04	338.381	84.595	0.949039	4	2.576
0.1392722E 04	-0.1583935E 04	0.2109152E 04	311.324	62.265	1.000000	5	3.220
-0.8308058E 01	0.7963405E 02	0.8006624E 02	95.956	15.993	0.037961	6	3.863
0.8606775E 02	0.1144503E 02	0.8682536E 02	7.575	1.082	0.041166	7	4.507
-0.6984184E 02	0.8485205E 02	0.1098988E 03	129.458	16.182	0.052106	8	5.151
0.9530436E 00	0.3965793E 00	0.1032263E 01	22.593	2.510	0.000489	9	5.795
0.2278416E 02	0.8784103E 02	0.9074780E 02	75.459	7.546	0.043026	10	6.439

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 61 FLT 16.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.504780E 04

ZERO POSITION USED 8.27 LOAD/IN USED -30400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.9871145E 03							
-0.1573236E 04	0.9430667E 03	0.1834242E 04	149.060	149.060	0.900983	1	0.644
0.1467468E 04	0.8323521E 03	0.1687089E 04	29.562	14.781	0.828701	2	1.288
0.3932900E 03	-0.6446257E 03	0.7551287E 03	301.387	100.462	0.370921	3	1.932
0.1661427E 04	-0.1176535E 04	0.2035823E 04	324.696	81.174	1.000000	4	2.576
0.1288179E 04	-0.1053329E 04	0.1664003E 04	320.728	64.146	0.817361	5	3.220
-0.1800637E 03	0.2173953E 03	0.2887644E 03	131.162	21.860	0.141842	6	3.863
0.2864554E 02	-0.3194426E 02	0.4290691E 02	311.884	44.555	0.021076	7	4.507
0.2319865E 02	0.1293789E 02	0.2656250E 02	29.148	3.644	0.013048	8	5.151
0.1535438E 02	0.5955193E 01	0.1646880E 02	21.199	2.355	0.008090	9	5.795
-0.1048783E 02	-0.6155164E 02	0.6243875E 02	279.670	27.967	0.030670	10	6.439

Table III. (Continued)

TEST 16 N = 5 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 61 FLT 16.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.182255E 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.6710559E 03							
-0.1322804E 03	-0.3882864E 03	0.4102004E 03	251.187	251.187	0.488175	1	0.644
0.4727393E 03	0.3484551E 03	0.5872647E 03	36.394	16.197	0.698921	2	1.288
-0.1046693E 03	-0.1166381E 03	0.1567166E 03	228.096	76.032	0.186507	3	1.932
0.6011580E 03	-0.1512624E 03	0.6198960E 03	345.976	86.469	0.737731	4	2.576
0.4668574E 03	-0.6986438E 03	0.8402732E 03	303.752	60.750	1.000000	5	3.220
0.1143989E 01	-0.4699326E 02	0.4700717E 02	271.395	45.232	0.055943	6	3.863
0.4982642E 02	-0.8162131E 02	0.9562794E 02	301.402	43.057	0.113806	7	4.507
-0.3545972E 02	0.3570145E 02	0.5031883E 02	134.805	10.951	0.059884	8	5.151
0.4044963E 02	0.4013658E 02	0.5698349E 02	44.777	4.975	0.067815	9	5.795
0.8659742E 01	0.3561281E 02	0.3665056E 02	76.333	7.633	0.043617	10	6.439

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 61 FLT 16.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.182713E 04

ZERO POSITION USED 3.11 LOAD/IN USED -20300.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.7175745E 03							
0.7305337E 03	-0.7061978E 02	0.7339390E 03	354.478	354.478	1.000000	1	0.644
-0.3392180E 03	-0.3168535E 03	0.4641821E 03	223.048	111.524	0.632453	2	1.288
-0.3209297E 03	0.1528431E 03	0.3554670E 03	154.534	51.511	0.484328	3	1.932
-0.2464662E 03	0.8896603E 02	0.2620317E 03	160.152	40.038	0.357021	4	2.576
0.2479869E 03	0.3438301E 03	0.4239299E 03	54.199	10.840	0.577609	5	3.220
0.7022075E 02	0.1117320E 03	0.1319659E 03	57.852	9.642	0.179805	6	3.863
-0.4127820E 02	0.1494195E 03	0.1550163E 03	105.443	15.063	0.211211	7	4.507
0.2555584E 03	0.1207605E 03	0.2826536E 03	25.292	3.162	0.385119	8	5.151
0.1545978E 03	0.1463736E 02	0.1552891E 03	5.409	0.601	0.211583	9	5.795
0.4420393E 03	0.2308561E 03	0.4986914E 03	27.576	2.758	0.679473	10	6.439

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 61 FLT 16.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.128213E 04

ZERO POSITION USED 1.15 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.7458748E 03							
0.3024521E 03	-0.2440443E 02	0.3034351E 03	355.387	355.387	0.991888	1	0.644
-0.1522128E 03	-0.1635733E 03	0.2234389E 03	227.060	113.530	0.730392	2	1.288
-0.1472354E 03	0.9235915E 02	0.1738058E 03	147.900	49.300	0.568148	3	1.932
-0.2074436E 03	0.4529045E 02	0.2123301E 03	167.684	41.921	0.694078	4	2.576
0.9012434E 02	0.1631460E 03	0.1863841E 03	61.083	12.217	0.609264	5	3.220
0.5308292E 02	0.4899529E 02	0.7223802E 02	42.707	7.118	0.236136	6	3.863
-0.6545396E 01	0.7357373E 02	0.7386429E 02	95.084	13.583	0.241452	7	4.507
0.1364916E 03	0.5197966E 02	0.1460543E 03	20.848	2.606	0.477432	8	5.151
0.8851801E 02	0.2400987E 01	0.8855052E 02	1.554	0.173	0.289460	9	5.795
0.2898538E 03	0.9782486E 02	0.3059165E 03	18.649	1.865	1.000000	10	6.439

Table III. (Continued)

TEST 16 N = 6

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 62 FLT 16.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.819368E 04

ZERO POSITION USED 9.51 LOAD/IN USED -26400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2557761E 04							
-0.7839702E 03	0.1799186E 03	0.8043506E 03	167.075	167.075	0.231230	1	0.633
0.1986828E 04	0.2225561E 04	0.2983368E 04	48.244	24.122	0.857646	2	1.265
-0.6278364E 03	-0.1668924E 04	0.1783111E 04	249.384	83.128	0.512598	3	1.898
0.2944696E 04	-0.1291443E 04	0.3215441E 04	336.319	84.080	0.924355	4	2.530
0.1751463E 04	-0.3005474E 04	0.3478576E 04	300.232	60.046	1.000000	5	3.163
0.1360792E 02	0.1506062E 02	0.2029787E 02	47.901	7.984	0.005835	6	3.795
-0.3720245E 02	0.5472881E 02	0.6617599E 02	124.206	17.744	0.019024	7	4.428
-0.4824460E 02	0.5694465E 01	0.4857950E 02	173.268	21.659	0.013965	8	5.060
-0.1539855E 02	0.7906853E 01	0.1730992E 02	152.820	16.980	0.004976	9	5.693
0.8076334E 02	0.3420414E 02	0.8770767E 02	22.953	2.295	0.025214	10	6.325

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 62 FLT 16.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.836003E 04

ZERO POSITION USED 3.75 LOAD/IN USED 25900.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2501930E 04							
-0.3129033E 03	-0.4464873E 03	0.5452148E 03	234.977	234.977	0.154444	1	0.633
0.2151272E 04	0.2495055E 04	0.3294431E 04	49.232	24.616	0.933221	2	1.265
-0.9685571E 03	-0.1551749E 04	0.1829215E 04	238.029	79.343	0.518166	3	1.898
0.3339465E 04	-0.1144595E 04	0.3530174E 04	341.061	85.270	1.000000	4	2.530
0.1122567E 04	-0.3221213E 04	0.3411212E 04	289.213	57.843	0.966302	5	3.163
-0.2375834E 03	-0.2886235E 02	0.2393302E 03	186.927	31.154	0.067796	6	3.795
-0.3781024E 02	-0.4440126E 02	0.5831883E 02	229.584	32.798	0.016520	7	4.428
-0.4873506E 02	-0.8575287E 02	0.9863396E 02	240.390	30.049	0.027940	8	5.060
-0.3313335E 02	-0.1903023E 02	0.3820953E 02	209.871	23.319	0.010824	9	5.693
0.7718130E 02	0.7433630E 02	0.1071580E 03	43.924	4.392	0.030355	10	6.325

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 62 FLT 16.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.792552E 04

ZERO POSITION USED 8.27 LOAD/IN USED -30400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2271338E 04							
-0.5607700E 03	0.4808252E 02	0.5628276E 03	175.099	175.099	0.170376	1	0.633
0.2079333E 04	0.2240826E 04	0.3056947E 04	47.141	23.570	0.925381	2	1.265
-0.5115471E 03	-0.1567354E 04	0.1648720E 04	251.924	83.975	0.499091	3	1.898
0.2980361E 04	-0.1075051E 04	0.3166325E 04	340.165	85.041	0.959097	4	2.530
0.1867179E 04	-0.2725144E 04	0.3303448E 04	304.417	60.883	1.000000	5	3.163
-0.2390650E 03	0.1159490E 03	0.2656995E 03	154.126	25.688	0.080431	6	3.795
-0.1984315E 02	-0.3979695E 02	0.4446964E 02	243.499	34.786	0.013462	7	4.428
-0.1163228E 02	-0.3361328E 02	0.3556912E 02	250.911	31.364	0.010767	8	5.060
-0.5054842E 02	-0.3084743E 02	0.5921745E 02	211.394	23.488	0.017926	9	5.693
0.4358597E 02	-0.4545067E 02	0.6297221E 02	313.800	31.380	0.019063	10	6.325

Table III. (Continued)

TEST 15 N = 6 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 62 FLT 16.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.292047E 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.9380120E 03							
0.1919037E 03	-0.7852822E 03	0.8083904E 03	283.732	283.732	0.580745	1	0.633
0.6689785E 03	0.8015205E 03	0.1044015E 04	50.150	25.075	0.750016	2	1.265
-0.4403992E 03	-0.3318633E 03	0.5514387E 03	217.000	72.333	0.396152	3	1.898
0.1144366E 04	-0.2951636E 03	0.1181814E 04	345.537	86.384	0.849014	4	2.530
0.3660686E 03	-0.1342992E 04	0.1391989E 04	285.247	57.049	1.000000	5	3.163
-0.1021443E 03	-0.5448648E 02	0.1710542E 03	198.574	33.096	0.122885	6	3.795
-0.1540665E 02	-0.1037296E 03	0.1048675E 03	261.552	37.365	0.075336	7	4.428
-0.8679680E 01	0.1806261E 02	0.2003981E 02	115.666	14.458	0.014397	8	5.060
0.1829424E 02	0.3833821E 00	0.1829825E 02	1.201	0.133	0.013145	9	5.693
0.3236798E 02	0.2878421E 02	0.4331532E 02	41.646	4.165	0.031118	10	6.325

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 62 FLT 16.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.337072E 04

ZERO POSITION USED 3.11 LOAD/IN USED -20300.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.7808162E 03							
0.7510015E 03	-0.2878662E 03	0.8042825E 03	339.028	339.028	0.576518	1	0.633
-0.4147793E 03	-0.2245479E 03	0.4716604E 03	208.430	104.215	0.338091	2	1.265
-0.4121592E 03	0.1810407E 03	0.4501677E 03	156.287	52.096	0.322685	3	1.898
-0.3854077E 03	0.8733745E 02	0.3951794E 03	167.232	41.808	0.283269	4	2.530
0.4276013E 03	0.4057771E 03	0.5894895E 03	43.500	8.700	0.422552	5	3.163
0.8021694E 01	0.1428614E 03	0.1430864E 03	86.786	14.464	0.102566	6	3.795
-0.1971854E 03	0.2287702E 03	0.3020229E 03	130.759	18.680	0.216493	7	4.428
0.2379915E 03	-0.9055110E 02	0.2546360E 03	339.169	42.396	0.182526	8	5.060
-0.2531449E 03	-0.3226630E 01	0.2531654E 03	180.730	20.081	0.181472	9	5.693
0.8294578E 03	0.1121703E 04	0.1395069E 04	53.518	5.352	1.000000	10	6.325

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 62 FLT 16.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.165922E 04

ZERO POSITION USED 1.15 LOAD/IN USED -16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.4049827E 03							
0.2524396E 03	0.4196401E 01	0.2524744E 03	0.952	0.952	0.310038	1	0.633
-0.1795064E 03	-0.1895877E 03	0.2610862E 03	226.565	113.282	0.320613	2	1.265
-0.1749198E 03	0.1334523E 03	0.2200146E 03	142.659	47.553	0.270177	3	1.898
-0.2804512E 03	0.3343828E 02	0.2824375E 03	173.201	43.300	0.346833	4	2.530
0.2313248E 03	-0.2579609E 03	0.3464895E 03	48.116	9.623	0.425468	5	3.163
0.2440070E 02	0.7804828E 02	0.8177361E 02	72.639	12.106	0.100418	6	3.795
-0.5939783E 02	0.9440060E 02	0.1115328E 03	122.179	17.454	0.136962	7	4.428
0.1412678E 03	-0.4543024E 02	0.1483930E 03	342.173	42.772	0.182226	8	5.060
-0.1377469E 03	0.7399800E 01	0.1379455E 03	176.925	19.658	0.169397	9	5.693
0.5123108E 03	0.6329907E 03	0.8143337E 03	51.015	5.101	1.000000	10	6.325

Table III. (Continued)

TEST 16 N = 7

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 63 FLT 16.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.548977E 04

ZERO POSITION USED 9.51 LOAD/IN USED -26400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1195610E 04							
-0.1965785E 04	0.2097555E 04	0.2874726E 04	133.143	133.143	1.000000	1	0.632
0.1056444E 04	0.3992327E 03	0.1129363E 04	20.702	10.351	0.392859	2	1.263
0.8237012E 03	-0.8321340E 03	0.1170867E 04	314.708	104.903	0.407297	3	1.895
0.1222967E 04	-0.1021254E 04	0.1593301E 04	320.136	80.034	0.554244	4	2.527
0.1842759E 04	-0.9416965E 03	0.2069523E 04	332.927	66.585	0.719903	5	3.159
0.7971858E 02	0.3806018E 02	0.8833813E 02	25.521	4.254	0.030729	6	3.790
-0.8037619E 02	0.7016565E 02	0.1067068E 03	138.372	19.839	0.037119	7	4.422
-0.4575114E 02	0.1168053E 02	0.4721866E 02	165.678	20.710	0.016425	8	5.054
-0.2083340E 02	0.1811183E 02	0.2760559E 02	138.397	15.444	0.009603	9	5.685
0.2848054E 02	0.5610480E 01	0.2902794E 02	11.144	1.114	0.010098	10	6.317

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 63 FLT 16.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.510445E 04

ZERO POSITION USED 3.75 LOAD/IN USED 25900.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1089387E 04							
-0.1693835E 04	0.1139319E 04	0.2041354E 04	146.074	146.074	1.000000	1	0.632
0.1244281E 04	-0.6767229E 03	0.1416400E 04	28.540	14.270	0.693853	2	1.263
0.5734050E 03	-0.7066461E 03	0.9101799E 03	309.049	103.016	0.445871	3	1.895
0.1635870E 04	-0.9018291E 03	0.1867984E 04	331.133	82.783	0.915071	4	2.527
0.9823584E 03	-0.1253299E 04	0.1592416E 04	309.990	61.618	0.780078	5	3.159
-0.1406917E 03	0.1915673E 03	0.2376605E 03	126.295	21.049	0.116433	6	3.790
0.4210219E 02	0.1019891E 03	0.1103370E 03	67.569	9.653	0.054051	7	4.422
-0.4432036E 02	-0.6867941E 02	0.8173831E 02	122.835	15.354	0.040041	8	5.054
-0.4384329E 02	-0.7629713E 02	0.8799706E 02	240.117	26.680	0.043107	9	5.685
-0.1897054E 02	0.4423689E 02	0.4813298E 02	113.212	11.321	0.023579	10	6.317

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 63 FLT 16.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.533086E 04

ZERO POSITION USED 8.27 LOAD/IN USED -30400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1245213E 04							
-0.1593841E 04	0.9901465E 03	0.1876358E 04	148.150	148.150	0.901373	1	0.632
0.1249338E 04	0.7176167E 03	0.1440670E 04	29.880	14.940	0.692171	2	1.263
0.5083850E 03	-0.1028615E 04	0.1147389E 04	296.301	98.767	0.551188	3	1.895
0.1783501E 04	-0.1073528E 04	0.2081667E 04	328.955	82.239	1.000000	4	2.527
0.1563671E 04	-0.1163601E 04	0.1949271E 04	323.349	64.670	0.936399	5	3.159
-0.6398839E 02	0.1763609E 03	0.1876104E 03	109.942	18.324	0.090125	6	3.790
-0.4188429E 02	0.1423725E 03	0.1484056E 03	106.393	15.199	0.071292	7	4.422
-0.5722096E 02	0.8908549E 02	0.8970531E 02	129.634	16.204	0.043093	8	5.054
-0.1879572E 02	0.8228233E 02	0.8440175E 02	102.867	11.430	0.040545	9	5.685
0.2194043E 02	0.1381212E 02	0.2592596E 02	32.192	3.219	0.012454	10	6.317

Table III. (Continued)

TEST 16 N = 7 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 63 FLT 16.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.153704E 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.6264546E 03							
-0.1191754E 03	-0.3839062E 03	0.4019805E 03	252.754	252.754	0.600645	1	0.632
0.4132408E 03	0.2730654E 03	0.4953171E 03	33.456	16.728	0.740110	2	1.263
0.3208383E 02	-0.1728768E 03	0.1758268E 03	280.514	93.505	0.262726	3	1.895
0.5627175E 03	-0.2183018E 03	0.6065176E 03	338.092	84.523	0.906268	4	2.527
0.3692554E 03	-0.5581606E 03	0.6692478E 03	303.487	60.697	1.000000	5	3.159
-0.4739237E 01	0.2201828E 02	0.2252254E 02	102.147	17.025	0.033654	6	3.790
-0.8407538E 01	-0.8999956E 02	0.9022734E 02	265.927	37.990	0.134819	7	4.422
-0.2908060E 01	0.3859778E 02	0.3870717E 02	94.309	11.789	0.057837	8	5.054
0.5036441E 02	0.6647173E 02	0.8339699E 02	52.849	5.872	0.124613	9	5.685
0.2407362E 02	0.5293484E 01	0.2464873E 02	12.401	1.240	0.036830	10	6.317

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 63 FLT 16.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.207914E 04

ZERO POSITION USED 3.11 LOAD/IN USED -20300.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.5794885E 03							
0.7245562E 03	-0.2057012E 03	0.7531895E 03	344.151	344.151	1.000000	1	0.632
-0.2785283E 03	-0.2824033E 03	0.3966479E 03	225.396	112.698	0.526624	2	1.263
-0.3059583E 03	0.2042900E 03	0.3678923E 03	146.269	48.756	0.488446	3	1.895
-0.2188125E 03	0.7346814E 02	0.2308170E 03	161.440	40.360	0.306453	4	2.527
0.2674036E 03	0.2706504E 03	0.3804741E 03	45.347	9.069	0.505151	5	3.159
0.1418433E 02	0.5947173E 02	0.6113985E 02	76.585	12.764	0.081175	6	3.790
0.5035338E 02	0.9556293E 02	0.1080173E 03	62.215	8.888	0.143413	7	4.422
0.2494488E 03	-0.1482930E 02	0.2498892E 03	356.598	44.575	0.331775	8	5.054
0.7125314E 02	-0.1425049E 03	0.1593256E 03	296.565	32.952	0.211535	9	5.685
0.3013208E 03	0.3902019E 03	0.4930027E 03	52.324	5.232	0.654553	10	6.317

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 63 FLT 16.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.145810E 04

ZERO POSITION USED 1.15 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.3473262E 03							
0.3306831E 03	-0.3161285E 02	0.3321907E 03	354.539	354.539	1.000000	1	0.632
-0.1597089E 03	-0.1527464E 03	0.2209941E 03	223.723	111.862	0.665263	2	1.263
-0.1082896E 03	0.1298255E 03	0.1690631E 03	129.831	43.277	0.508934	3	1.895
-0.1230791E 03	0.2531215E 02	0.1256550E 03	168.379	42.095	0.378262	4	2.527
0.1217243E 03	0.1349473E 03	0.1817349E 03	47.949	9.590	0.547080	5	3.159
0.2173779E 02	-0.9102220E 01	0.2356654E 02	337.280	56.213	0.070943	6	3.790
0.5823193E 02	0.8817615E 02	0.8966014E 02	49.498	7.071	0.269906	7	4.422
0.1787512E 03	-0.6231492E 01	0.1798592E 03	358.014	44.752	0.541433	8	5.054
0.2599348E 02	-0.1097251E 03	0.1127620E 03	283.327	31.481	0.339450	9	5.685
0.2398115E 03	0.1907499E 03	0.3064231E 03	38.499	3.850	0.922431	10	6.317

Table III. (Continued)

TEST 16 N = 6

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 64 FLT 16.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.774302E 04

ZERO POSITION USED 9.51 LOAD/IN USED -26400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2492522E 04							
-0.2049502E 04	0.7597058E 02	0.2050909E 04	177.877	177.877	0.708500	1	0.637
0.2633535E 04	0.5248337E 03	0.2685322E 04	11.271	5.635	0.927662	2	1.275
0.2450077E 03	-0.7657048E 03	0.8039482E 03	287.743	95.914	0.277729	3	1.912
0.2335345E 04	-0.9817324E 03	0.2533305E 04	337.199	84.300	0.875147	4	2.549
0.1424222E 04	-0.2520120E 04	0.2894721E 04	299.472	59.894	1.000000	5	3.187
-0.2326340E 03	0.2436095E 02	0.2413730E 03	164.535	27.423	0.083384	6	3.824
-0.5507149E 02	-0.9171924E 02	0.1069826E 03	239.018	34.145	0.036958	7	4.461
-0.5976410E 02	0.7345649E 01	0.6021384E 02	172.993	21.624	0.020801	8	5.099
-0.1685544E 02	-0.3301315E 02	0.3796715E 02	242.953	26.995	0.012805	9	5.736
0.1287424E 03	-0.4194966E 01	0.1288107E 03	358.134	35.813	0.044498	10	6.373

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 64 FLT 16.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.731502E 04

ZERO POSITION USED 3.75 LOAD/IN USED 25900.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2534947E 04							
-0.1618672E 04	-0.7862988E 03	0.1799366E 04	205.912	205.912	0.635821	1	0.637
0.2727160E 04	0.7559236E 03	0.2829986E 04	15.492	7.746	1.000000	2	1.275
-0.1087043E 03	-0.6266172E 03	0.6359761E 03	260.158	86.719	0.224728	3	1.912
0.2599941E 04	-0.7151172E 03	0.2696495E 04	344.621	86.155	0.952830	4	2.549
0.1138791E 04	-0.2475941E 04	0.2725276E 04	294.700	58.940	0.963000	5	3.187
-0.4431987E 03	0.5321964E 02	0.4463826E 03	173.153	28.859	0.157733	6	3.824
-0.1786786E 02	-0.1047338E 03	0.1062470E 03	260.318	37.188	0.037543	7	4.461
0.1401890E 02	-0.6881993E 02	0.7023323E 02	281.514	35.189	0.024818	8	5.099
-0.1105278E 03	-0.8281982E 02	0.1381141E 03	216.845	24.094	0.048804	9	5.736
-0.1523751E 02	-0.1435013E 02	0.2093102E 02	223.282	22.328	0.007396	10	6.373

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 64 FLT 16.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.636872E 04

ZERO POSITION USED 8.27 LOAD/IN USED -30400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2320016E 04							
-0.1603365E 04	-0.6184521E 03	0.1718505E 04	201.093	201.093	0.629923	1	0.637
0.2623271E 04	0.7490520E 03	0.2728118E 04	15.936	7.968	1.000000	2	1.275
0.8355957E 02	-0.6772703E 03	0.6824055E 03	277.033	92.344	0.250138	3	1.912
0.1923597E 04	-0.7906709E 03	0.2079756E 04	337.655	84.414	0.762341	4	2.549
0.1477942E 04	-0.2051771E 04	0.2528051E 04	305.766	61.153	0.926885	5	3.187
-0.1204386E 03	-0.7979323E 02	0.1444729E 03	213.525	35.588	0.052957	6	3.824
0.1080924E 03	-0.7787672E 02	0.1332245E 03	324.229	46.318	0.048834	7	4.461
0.3378654E 01	-0.2742651E 02	0.2763383E 02	277.023	34.628	0.010129	8	5.099
-0.3659492E 01	-0.6529242E 02	0.6539487E 02	266.792	29.644	0.023971	9	5.736
0.1175260E 02	-0.4862729E 02	0.5002736E 02	283.587	28.359	0.018338	10	6.373

Table III. (Continued)

TEST 16 N = 8 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 64 FLT 16.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.241343E 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.8968018E 03							
-0.1490866E 03	-0.8832664E 03	0.8957600E 03	260.419	260.419	0.808326	1	0.637
0.8299375E 03	0.3036064E 03	0.8837275E 03	20.094	10.047	0.797468	2	1.275
-0.1197107E 03	-0.1130462E 03	0.1646514E 03	223.360	74.453	0.148580	3	1.912
0.8715813E 03	-0.1528650E 03	0.8848850E 03	350.052	87.513	0.798512	4	2.549
0.3034756E 03	-0.1065804E 04	0.1108167E 04	285.894	57.179	1.000000	5	3.187
-0.1843216E 03	-0.3206158E 02	0.1870893E 03	189.868	31.645	0.168828	6	3.824
0.2003743E 01	-0.1116475E 03	0.1118654E 03	271.026	38.718	0.100946	7	4.461
-0.2946309E 01	0.3965813E 01	0.4940486E 01	126.610	15.826	0.004458	8	5.099
0.4999094E 02	0.1139056E 02	0.5127220E 02	12.836	1.426	0.046268	9	5.736
0.4073476E 02	0.3996127E 02	0.5706332E 02	44.451	4.445	0.051493	10	6.373

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 64 FLT 16.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.245718E 04

ZERO POSITION USED 3.11 LOAD/IN USED -20300.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.8496006E 03							
0.5815437E 03	-0.2414885E 03	0.6296902E 03	337.449	337.449	0.913219	1	0.637
-0.4155522E 03	-0.1775506E 03	0.4518936E 03	203.135	101.568	0.655366	2	1.275
-0.2893330E 03	0.2514294E 03	0.3833149E 03	139.009	46.336	0.555909	3	1.912
-0.2909668E 03	0.1256073E 03	0.3169209E 03	156.651	39.163	0.459620	4	2.549
0.3627083E 03	-0.2463600E 03	0.4384639E 03	34.185	6.837	0.635890	5	3.187
0.1102683E 03	0.1285736E 02	0.1110154E 03	6.651	1.108	0.161002	6	3.824
0.1023868E 02	0.7352452E 02	0.7529637E 02	77.545	11.078	0.109200	7	4.461
0.3256226E 03	0.7338899E 02	0.3337903E 03	12.701	1.588	0.484085	8	5.099
-0.1778976E 03	0.5574217E 02	0.1864262E 03	162.602	18.067	0.270368	9	5.736
0.4100039E 03	0.5543879E 03	0.6695283E 03	53.515	5.351	1.000000	10	6.373

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 64 FLT 16.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.158380E 04

ZERO POSITION USED 1.15 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.4218691E 03							
0.2766309E 03	0.7252481E 01	0.2767258E 03	1.502	1.502	0.622407	1	0.637
-0.2647144E 03	-0.1115994E 03	0.2872771E 03	202.860	101.430	0.646138	2	1.275
-0.2166262E 03	0.1426245E 03	0.2593621E 03	146.640	48.880	0.583352	3	1.912
-0.2261993E 03	0.2200549E 02	0.2272672E 03	174.444	43.611	0.511165	4	2.549
0.1362403E 03	0.1744781E 03	0.2213685E 03	52.016	10.403	0.497898	5	3.187
0.1123851E 03	0.2212463E 01	0.1124069E 03	1.128	0.188	0.252823	6	3.824
0.2537059E 02	0.3284673E 02	0.4150391E 02	52.318	7.474	0.093350	7	4.461
0.2108289E 03	-0.1402952E 02	0.2112951E 03	356.193	44.524	0.475241	8	5.099
-0.1133555E 03	0.1098392E 02	0.1138664E 03	174.465	19.385	0.256151	9	5.736
0.3215752E 03	0.3070247E 03	0.4446062E 03	43.674	4.367	1.000000	10	6.373

Table III. (Continued)

TEST 16 N = 9

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 65 FLT 16.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.d60336E 04

ZERO POSITION USED 9.51 LOAD/IN USED -26400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2921308E 04							
-0.1842065E 04	-0.1085697E 04	0.2138208E 04	210.515	210.515	0.544238	1	0.642
0.3881517E 04	0.6077664E 03	0.3928811E 04	8.899	4.450	1.000000	2	1.285
-0.2960936E 03	-0.4662744E 03	0.5534490E 03	237.782	79.261	0.140882	3	1.927
0.2775731E 04	-0.2080441E 04	0.3468649E 04	323.148	80.787	0.882926	4	2.569
0.5548730E 03	-0.2709141E 04	0.2765380E 04	281.575	56.315	0.703872	5	3.211
-0.4810388E 03	0.1126625E 03	0.4940559E 03	166.819	27.803	0.125752	6	3.854
0.4155392E 02	-0.1623750E 03	0.1676078E 03	284.355	40.622	0.042661	7	4.496
-0.1337665E 03	0.6419699E 02	0.1483736E 03	154.363	19.295	0.037766	8	5.138
-0.2503110E 02	-0.5539357E 02	0.6077419E 02	245.709	27.301	0.015469	9	5.780
0.7320621E 02	0.2566339E 02	0.7757420E 02	19.319	1.932	0.019745	10	6.423

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 65 FLT 16.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.988735E 04

ZERO POSITION USED 3.75 LOAD/IN USED 25900.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.3608079E 04							
-0.1574775E 04	-0.1685868E 04	0.2306960E 04	226.951	226.951	0.539506	1	0.642
0.4103465E 04	0.8738926E 03	0.4195484E 04	12.022	6.011	0.981156	2	1.285
-0.9630547E 03	-0.6062095E 03	0.1137965E 04	212.189	70.730	0.266124	3	1.927
0.3593717E 04	-0.2317309E 04	0.4276063E 04	327.185	81.796	1.000000	4	2.569
-0.7235150E 02	-0.3481476E 04	0.3482227E 04	268.809	53.762	0.814354	5	3.211
-0.3550352E 03	0.1664858E 03	0.3921335E 03	154.876	25.813	0.091704	6	3.854
0.1127435E 03	0.5499715E 01	0.1128775E 03	2.793	0.399	0.026398	7	4.496
-0.2303654E 02	0.9223903E 02	0.9507216E 02	104.023	13.003	0.022234	8	5.138
0.6942728E 01	-0.1853044E 02	0.1978835E 02	290.539	32.282	0.004628	9	5.780
0.4366228E 02	0.2608253E 02	0.5191360E 02	32.748	3.275	0.012141	10	6.423

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 65 FLT 16.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.929361E 04

ZERO POSITION USED 8.27 LOAD/IN USED -30400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2897371E 04							
-0.1375395E 04	-0.1707894E 04	0.2192855E 04	231.155	231.155	0.481685	1	0.642
0.4435733E 04	0.1024299E 04	0.4552465E 04	13.003	6.501	1.000000	2	1.285
-0.1018961E 04	-0.5135713E 03	0.1141068E 04	206.749	68.916	0.250648	3	1.927
0.3396653E 04	-0.1881408E 04	0.3882909E 04	331.018	82.754	0.852924	4	2.569
-0.8900120E 03	-0.3191021E 04	0.3312814E 04	285.584	57.117	0.727697	5	3.211
-0.5257383E 03	0.8680554E 02	0.5328564E 03	170.624	28.437	0.117048	6	3.854
0.5656697E 02	-0.1352606E 03	0.1466126E 03	292.695	41.814	0.032205	7	4.496
0.2598450E 02	0.1271990E 02	0.2893077E 02	26.083	3.260	0.006355	8	5.138
0.2570610E 02	0.4263902E 01	0.2611652E 02	9.396	1.044	0.005737	9	5.780
0.2046832E 02	-0.2792719E 02	0.3462485E 02	306.238	30.024	0.007606	10	6.423

Table III. (Continued)

TEST 16 N = 9 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 65 FLT 16.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.316201E 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1030415E 04							
-0.1647275E 03	-0.1136531E 04	0.1148407E 04	261.753	261.753	0.778228	1	0.642
0.1236088E 04	0.3598220E 03	0.1287394E 04	16.230	8.115	0.872413	2	1.285
-0.4124458E 03	0.1706174E 02	0.4127983E 03	177.631	59.210	0.279736	3	1.927
0.1266853E 04	-0.7442903E 03	0.1469314E 04	329.565	82.391	0.995693	4	2.569
-0.1623852E 03	-0.1466708E 04	0.1475670E 04	263.682	52.736	1.000000	5	3.211
-0.2054724E 03	0.3832152E 02	0.2090154E 03	169.435	28.239	0.141641	6	3.854
0.5165794E 02	-0.2772764E 02	0.5862907E 02	331.775	47.396	0.039730	7	4.496
0.5479942E 02	0.4924651E 02	0.7367625E 02	41.945	5.243	0.049927	8	5.138
0.6053873E 02	0.4756583E 02	0.7698988E 02	38.157	4.240	0.052173	9	5.780
0.9630188E 01	0.1923615E 02	0.2151208E 02	63.406	6.341	0.014578	10	6.423

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 65 FLT 16.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.223665E 04

ZERO POSITION USED 3.11 LOAD/IN USED -20300.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.9757551E 03							
0.5991628E 03	-0.4074700E 03	0.7245681E 03	325.782	325.782	0.976327	1	0.642
-0.5136328E 03	-0.1652195E 03	0.5395518E 03	197.831	98.916	0.727005	2	1.285
-0.2554110E 03	0.2610093E 03	0.3651855E 03	134.379	44.793	0.492060	3	1.927
-0.3764077E 03	0.2113387E 03	0.4308074E 03	150.622	37.656	0.580480	4	2.569
0.5722344E 03	-0.1735970E 03	0.5979666E 03	16.876	3.375	0.805741	5	3.211
0.1852630E 03	0.8578297E 02	0.2041595E 03	24.846	4.141	0.275089	6	3.854
0.1341329E 03	0.1098151E 03	0.1733522E 03	39.307	5.615	0.233579	7	4.496
0.7419971E 03	-0.1540200E 02	0.7421570E 03	358.811	44.851	1.000000	8	5.138
0.4540991E 03	-0.2318147E 03	0.5098469E 03	332.956	36.995	0.686980	9	5.780
0.5253604E 03	0.5059731E 03	0.7293916E 03	43.923	4.392	0.982800	10	6.423

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 65 FLT 16.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.160894E 04

ZERO POSITION USED 1.15 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.4962910E 03							
0.2897129E 03	-0.6284651E 02	0.2964509E 03	347.760	347.760	0.575175	1	0.642
-0.2994604E 03	-0.9094107E 02	0.3129640E 03	196.893	98.446	0.607215	2	1.285
-0.1139447E 03	0.2270842E 03	0.2540881E 03	116.646	38.982	0.492944	3	1.927
-0.2725146E 03	0.1035712E 03	0.2915325E 03	159.190	39.798	0.565632	4	2.569
0.3145935E 03	-0.1806591E 03	0.3627764E 03	-29.867	5.973	0.703860	5	3.211
0.5319495E 02	0.2712224E 02	0.5971028E 02	27.015	4.503	0.115850	6	3.854
0.1285590E 03	0.7718329E 01	0.1287905E 03	3.436	0.491	0.249880	7	4.496
0.3446740E 03	-0.5478804E 02	0.3489985E 03	350.971	43.871	0.677128	8	5.138
0.2397731E 03	-0.2094162E 03	0.3183494E 03	318.866	35.430	0.617662	9	5.780
0.4208533E 03	0.2973398E 03	0.5154099E 03	35.260	3.526	1.000000	10	6.423

Table III. (Continued)

TEST 16 N = 10

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 67 FLT 16.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.7487225 04

ZERO POSITION USED 9.51 LOAD/IN USED -26400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.9288245E 03							
-0.1218797E 04	0.2220439E 04	0.2532946E 04	118.762	118.762	0.805877	1	0.620
0.3184436E 03	0.1381032E 04	0.1391727E 04	77.015	38.509	0.450915	2	1.240
0.4863103E 03	-0.1737040E 04	0.1803883E 04	285.640	95.213	0.573903	3	1.860
0.2032274E 04	-0.6568431E 03	0.2120946E 04	343.274	85.844	0.674795	4	2.480
0.2070422E 04	-0.2364823E 04	0.3143093E 04	311.202	62.260	1.000000	5	3.100
-0.1685979E 03	-0.4420532E 03	0.1742957E 03	194.692	32.449	0.055454	6	3.720
0.2495104E 02	0.1957703E 01	0.2506776E 02	4.479	0.640	0.007975	7	4.340
-0.1130656E 03	-0.2205329E 02	0.1171618E 03	190.854	23.957	0.037275	8	4.960
-0.6736462E 02	-0.4945433E 02	0.8358641E 02	216.300	24.033	0.026594	9	5.580
0.6430387E-01	0.4317940E 02	0.4317944E 02	89.915	8.991	0.013738	10	6.200

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 67 FLT 16.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.6872915 04

ZERO POSITION USED 3.75 LOAD/IN USED 25900.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1303492E 04							
-0.8089949E 03	0.1045741E 04	0.1322137E 04	127.726	127.726	0.540647	1	0.620
0.8425296E 03	0.1843167E 04	0.2031151E 04	65.493	32.746	0.830576	2	1.240
-0.6395871E 02	-0.1436013E 04	0.1437436E 04	267.450	89.150	0.587795	3	1.860
0.2340988E 04	-0.6728249E 03	0.2435759E 04	343.965	85.991	0.995028	4	2.480
0.1381494E 04	-0.2017838E 04	0.2445472E 04	304.396	60.879	1.000000	5	3.100
-0.2515066E 03	0.2615837E 02	0.2528777E 03	174.872	29.145	0.119681	6	3.720
-0.1506634E 02	-0.4171061E 01	0.1563305E 02	195.475	27.925	0.006393	7	4.340
-0.3893325E 02	-0.2365854E 02	0.4557501E 02	211.273	26.409	0.013535	8	4.960
0.4227489E 02	-0.1327264E 02	0.4430944E 02	342.570	38.063	0.018119	9	5.580
-0.7195638E 00	0.3367183E 01	0.3443214E 01	102.063	10.206	0.001408	10	6.200

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 67 FLT 16.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.6415962 04

ZERO POSITION USED 8.27 LOAD/IN USED -30400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.1133937E 04							
-0.8514517E 03	0.9749314E 03	0.1294396E 04	131.132	131.132	0.491908	1	0.620
0.7532000E 03	0.1989255E 04	0.2127074E 04	69.262	34.631	0.808350	2	1.240
-0.1026716E 03	-0.1402737E 04	0.1406485E 04	265.814	88.605	0.534507	3	1.860
0.2071054E 04	-0.5430133E 03	0.2141056E 04	345.305	86.327	0.813864	4	2.480
0.1922959E 04	-0.1730205E 04	0.2583137E 04	318.889	63.778	1.000000	5	3.100
-0.2157846E 03	-0.1074724E 03	0.2446546E 03	206.058	34.343	0.092976	6	3.720
-0.2122396E 01	-0.5970056E 02	0.5873897E 02	267.929	38.275	0.022322	7	4.340
-0.2705878E 02	-0.1848905E 03	0.1865805E 03	261.673	32.709	0.071009	8	4.960
-0.6450157E 02	-0.8835509E 02	0.1094295E 03	233.844	25.983	0.041586	9	5.580
0.1405402E 02	-0.1411997E 02	0.1992207E 02	314.866	31.487	0.007571	10	6.200

Table III. (Continued)

TEST 16 N = 10 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 67 FLT 16.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.217388E 04

ZERO POSITION USED 0.39 LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.5843159E 03							
0.1094260E 03	-0.3857109E 03	0.4006609E 03	285.701	285.701	0.395249	1	0.620
0.3470203E 03	-0.6059814E 03	0.6983101E 03	60.202	30.101	0.689375	2	1.240
-0.1508221E 03	-0.3128672E 03	0.3473236E 03	244.263	81.421	0.342631	3	1.860
0.7418093E 03	-0.1753136E 03	0.7617214E 03	347.040	86.760	0.771161	4	2.480
0.9139821E 03	-0.8705281E 03	0.1013695E 04	300.822	60.164	1.000000	5	3.100
-0.1266922E 03	-0.7001505E 01	0.1258156E 03	183.165	30.527	0.124102	6	3.720
0.1620772E 02	-0.8020129E 02	0.8182256E 02	281.425	40.204	0.080717	7	4.340
-0.3514551E 02	0.4910379E 02	0.6038533E 02	125.593	15.699	0.059570	8	4.960
0.2681882E 02	0.4267274E 02	0.5040051E 02	57.852	6.428	0.049720	9	5.580
0.5423448E 00	0.9075092E 01	0.9091284E 01	86.580	8.658	0.008968	10	6.200

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 67 FLT 16.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.192164E 04

ZERO POSITION USED 3.11 LOAD/IN USED -20300.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.7333643E 03							
0.7029724E 03	-0.1879653E 03	0.7276682E 03	345.030	345.030	1.000000	1	0.620
-0.3502025E 03	-0.2485853E 03	0.4377102E 03	214.621	107.311	0.601524	2	1.240
-0.2677458E 03	0.1495165E 03	0.3066643E 03	150.820	50.273	0.421434	3	1.860
-0.2292556E 03	0.7929369E 02	0.2416425E 03	160.846	40.212	0.332078	4	2.480
0.3186892E 03	0.3933992E 03	0.5062854E 03	50.989	10.198	0.695764	5	3.100
0.3941714E 02	0.1232141E 03	0.1290643E 03	72.683	12.114	0.177367	6	3.720
-0.7853601E 02	0.2279311E 03	0.2410819E 03	109.012	15.573	0.331307	7	4.340
0.2163698E 03	-0.1403015E 03	0.2578767E 03	327.039	40.880	0.354388	8	4.960
0.1061163E 03	0.2966404E 03	0.3150493E 03	70.316	7.813	0.432957	9	5.580
0.3250479E 03	0.2967520E 03	0.4401336E 03	42.394	4.239	0.604855	10	6.200

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 67 FLT 16.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.118157E 04

ZERO POSITION USED 1.15 LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.6246470E 03							
0.2597568E 03	-0.5133961E 02	0.3041216E 03	350.281	350.281	0.820319	1	0.620
-0.1363202E 03	-0.2011204E 03	0.2429663E 03	235.870	117.935	0.655362	2	1.240
-0.1439490E 03	0.1209636E 03	0.1880253E 03	139.959	46.653	0.507168	3	1.860
-0.1609600E 03	0.2935992E 02	0.1636157E 03	169.663	42.416	0.441327	4	2.480
0.1897134E 03	0.2182394E 03	0.2891697E 03	49.000	9.800	0.779988	5	3.100
0.7439323E 01	0.2777859E 02	0.2875745E 02	75.007	12.501	0.077569	6	3.720
-0.5345289E 01	0.7993391E 02	0.8011243E 02	93.826	13.404	0.216090	7	4.340
0.1429315E 03	-0.1335774E 03	0.1956331E 03	316.938	39.617	0.527689	8	4.960
0.8057800E 02	0.1242787E 03	0.1481145E 03	57.042	6.339	0.399516	9	5.580
0.3201135E 03	0.1870094E 03	0.3707356E 03	30.293	3.029	1.000000	10	6.200

Table III. (Continued)

TEST 16 N = 11

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 68 FLT 16.0 TR 6 1 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.103240E 05

ZERO POSITION USED 9.51 LOAD/IN USED -26400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.1043374E 03							
-0.1047578E 04	0.4222277E 04	0.4350289E 04	103.934	103.934	0.992376	1	0.612
-0.7276343E 03	0.1534115E 04	0.1697922E 04	115.375	57.688	0.383424	2	1.223
0.6477312E 03	-0.2022265E 04	0.2123332E 04	287.757	95.919	0.479600	3	1.835
0.1429982E 04	-0.4579941E 03	0.1501532E 04	342.241	85.560	0.339074	4	2.446
0.2851314E 04	-0.3375[illegible]E 04	0.4428336E 04	310.251	62.050	1.000000	5	3.058
-0.1125785E 03	-0.2105118E 03	0.2387246E 03	241.863	40.310	0.053908	6	3.670
0.1516526E 02	-0.4183783E 02	0.4450157E 02	289.924	41.418	0.010049	7	4.281
-0.1113522E 03	0.7052925E 02	0.1319706E 03	147.540	18.443	0.029801	8	4.893
-0.5403584E 01	0.1096439E 02	0.1222359E 02	116.236	12.915	0.002760	9	5.505
-0.4011751E 02	-0.4687039E 01	0.4039036E 02	186.664	18.666	0.009121	10	6.116

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 68 FLT 16.0 TR 31 2 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.771695E 04

ZERO POSITION USED 3.75 LOAD/IN USED 25900.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.7329004E 03							
-0.6482245E 03	0.2417540E 04	0.2502937E 04	105.010	105.010	0.862638	1	0.612
0.3521694E 03	0.2094373E 04	0.2123791E 04	80.455	40.228	0.731968	2	1.223
-0.1395389E 03	-0.1428403E 04	0.1435292E 04	264.421	88.140	0.494674	3	1.835
0.1524310E 04	-0.1027771E 04	0.1838432E 04	326.010	81.503	0.633616	4	2.446
0.1532645E 04	-0.2463655E 04	0.2901491E 04	301.986	60.377	1.000000	5	3.058
-0.4247549E 03	-0.2647146E 03	0.5004905E 03	211.932	35.322	0.172494	6	3.670
-0.5447957E 02	-0.2746133E 03	0.2799651E 03	258.779	36.968	0.096490	7	4.281
0.7220714E 02	0.3342054E 01	0.7228441E 02	2.650	0.331	0.024913	8	4.893
-0.2747252E 02	0.1597020E 02	0.3177713E 02	149.830	16.648	0.010952	9	5.505
0.4596898E 02	0.5781141E 01	0.4635876E 02	7.164	0.716	0.015978	10	6.116

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 68 FLT 16.0 TR 11 3 FLAP BEND STA 43
OVERALL CYCLIC LOAD = 0.801987E 04

ZERO POSITION USED 8.27 LOAD/IN USED -30400.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.2477682E 03							
-0.7049643E 03	0.2535265E 04	0.2631431E 04	105.537	105.537	0.891538	1	0.612
0.3721716E 02	0.2175649E 04	0.2175961E 04	89.020	44.510	0.737226	2	1.223
-0.1735341E 03	-0.1548434E 04	0.1558127E 04	263.605	87.868	0.527999	3	1.835
0.1649521E 04	-0.1099293E 04	0.1999936E 04	326.637	81.659	0.677247	4	2.446
0.1732887E 04	-0.2388931E 04	0.2951561E 04	305.552	61.190	1.000000	5	3.058
-0.1235350E 03	-0.2922222E 03	0.3172612E 03	247.084	41.181	0.107489	6	3.670
0.1124658E 03	-0.1724481E 03	0.2058774E 03	303.112	43.302	0.069752	7	4.281
0.3492044E 02	-0.6738971E 02	0.7589952E 02	297.393	37.174	0.025715	8	4.893
-0.4762336E 01	0.3776451E 02	0.3806366E 02	97.187	10.799	0.012896	9	5.505
0.3202745E 02	-0.4873557E 02	0.5831743E 02	303.312	30.331	0.019756	10	6.116

Table III. (Concluded)

TEST 16 N = 11 (CONTINUED)

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 68 FLT 16.0 TR 41 2 FLAP BEND STA 118
OVERALL CYCLIC LOAD = 0.210801E 04

ZERO POSITION USED 0.3° LOAD/IN USED -14150.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.3922590E 03							
0.1668367E 03	-0.3491118E 02	0.1704502E 03	348.181	348.181	0.152660	1	0.612
0.2122374E 03	0.6934781E 03	0.7252415E 03	72.980	36.490	0.649549	2	1.223
-0.1352282E 03	-0.3130474E 03	0.3427341E 03	245.977	81.992	0.306963	3	1.835
0.5593018E 03	-0.2486555E 03	0.6120852E 03	336.031	84.008	0.548202	4	2.446
0.5435361E 03	-0.9753003E 03	0.1116531E 04	299.131	59.825	1.000000	5	3.058
-0.1640567E 03	-0.1207692E 03	0.2037151E 03	216.358	36.060	0.182453	6	3.670
-0.1706627E 02	-0.1725354E 03	0.1733775E 03	264.351	37.764	0.155282	7	4.281
0.1439224E 02	0.4663333E 02	0.4880421E 02	72.349	9.106	0.043711	8	4.893
0.2638161E 02	0.5066673E 02	0.5710587E 02	62.485	6.943	0.051146	9	5.505
0.1871213E 02	0.1755186E 02	0.2565562E 02	43.167	4.317	0.022978	10	6.116

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 68 FLT 16.0 TR 34 2 CHORD BEND STA 21.
OVERALL CYCLIC LOAD = 0.252017E 04

ZERO POSITION USED 3.1° LOAD/IN USED -20300.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
0.6238519E 03							
0.7297529E 03	-0.2161351E 03	0.7610872E 03	343.502	343.502	0.805293	1	0.612
-0.2905996E 03	-0.3271428E 03	0.4375735E 03	228.385	114.193	0.462969	2	1.223
-0.3718455E 03	0.2342331E 03	0.4394702E 03	147.792	49.264	0.464996	3	1.835
-0.2564500E 03	0.1622621E 03	0.3051646E 03	147.378	36.970	0.322889	4	2.446
0.3746135E 03	0.3204129E 03	0.4929506E 03	40.541	8.108	0.521582	5	3.058
-0.1144478E 02	0.2252514E 03	0.2255419E 03	92.909	15.485	0.238642	6	3.670
-0.1889750E 03	0.9731677E 02	0.2125609E 03	152.753	21.822	0.224907	7	4.281
0.2274269E 03	-0.2653013E 03	0.3498181E 03	310.551	38.819	0.370137	8	4.893
-0.1928237E 03	-0.3429951E 03	0.3934911E 03	240.656	26.740	0.416335	9	5.505
0.8217551E 03	0.4683428E 03	0.9451061E 03	29.601	2.960	1.000000	10	6.116

HARMONIC ANALYSIS MODEL CL8705 SHIP 33 T 010 CTR 68 FLT 16.0 TR 38 2 CHORD BEND STA 69
OVERALL CYCLIC LOAD = 0.159380E 04

ZERO POSITION USED 1.1° LOAD/IN USED 16200.00

AJ	BJ	CJ	PHIJC	PSIJC	CJ/CJMAX	J	FREQUENCY
-0.6315623E 03							
0.2946745E 03	-0.3479293E 02	0.2957202E 03	353.268	353.268	0.519160	1	0.612
-0.1330327E 03	-0.2285317E 03	0.2644321E 03	239.795	119.898	0.462667	2	1.223
-0.1539235E 03	0.1425778E 03	0.2097381E 03	137.173	45.724	0.366971	3	1.835
-0.1632983E 03	0.5083054E 02	0.1710172E 03	162.709	40.677	0.299222	4	2.446
0.1792275E 03	0.2284005E 03	0.2904832E 03	51.903	10.381	0.508244	5	3.058
0.2733681E 02	0.5650336E 02	0.7190266E 02	67.654	11.276	0.125905	6	3.670
-0.1244508E 03	0.8137402E 02	0.1498869E 03	146.865	20.981	0.260471	7	4.281
0.1414162E 03	-0.1953244E 03	0.2331173E 03	307.346	35.418	0.407876	8	4.893
-0.1236055E 03	-0.2023533E 03	0.2372226E 03	238.540	26.504	0.415059	9	5.505
0.5302495E 03	0.2132905E 03	0.5715393E 03	21.912	2.191	1.000000	10	6.116

Table IV. 33-Foot 3-Blade Rotor Reduced Experimental Blade Flap Bending Moment Data

TEST 12 BLADE 1 r/R = .217

TABLE IVa

N	M0	DEL	M1C	DEL	M1S	DEL	M2C	DEL	M2S	DEL	M3C	DEL	M3S	DEL	M4C	DEL	M4S	DEL
1	-8770.	170.	-11184.	90.	3436.	442.	343.	-38.	1750.	186.	67.	56.	577.	8.	-107.	70.	608.	208.
2	-13554.	-10.	11700.	35.	182.	269.	-2497.	-435.	-2461.	281.	385.	42.	519.	73.	369.	-90.	742.	256.
3	-11437.	-368.	-2020.	585.	993.	580.	-677.	84.	-151.	-105.	26.	-104.	367.	-76.	-3.	-50.	238.	-68.
4	-13497.	-121.	5962.	914.	-4157.	-768.	-2198.	-193.	-1809.	-358.	259.	-13.	197.	-137.	380.	122.	642.	60.
5	-10652.	-146.	-4360.	-756.	1947.	106.	-432.	22.	293.	167.	98.	-93.	477.	19.	-199.	-206.	266.	-30.
6	-11187.	-444.	-639.	242.	2245.	-327.	-875.	-300.	-233.	165.	138.	-5.	609.	-12.	60.	1.	511.	-25.
7	-12590.	-735.	3611.	214.	823.	-251.	-684.	489.	-1361.	-171.	247.	32.	211.	-150.	159.	-11.	356.	-28.
8	-10809.	-130.	-2457.	285.	1027.	-697.	-1095.	-549.	-168.	-139.	130.	7.	406.	-40.	-37.	-89.	388.	41.
9	-12780.	34.	2280.	855.	-4170.	-691.	-2003.	-295.	-853.	-89.	176.	-44.	436.	50.	179.	-2.	191.	-143.
10	-14078.	1116.	1627.	-1915.	-9204.	1537.	-2151.	862.	-846.	235.	311.	7.	473.	124.	286.	-4.	188.	-139.
11	-10550.	-128.	-3780.	310.	1385.	-475.	-981.	-571.	246.	28.	167.	65.	386.	-79.	82.	82.	245.	-45.
12	-10313.	-523.	-2286.	651.	3543.	-1237.	36.	93.	-283.	-249.	173.	75.	589.	138.	61.	61.	385.	64.
13	-8181.	219.	-3307.	-462.	10194.	404.	1201.	691.	-312.	-203.	112.	50.	588.	96.	-19.	24.	222.	-127.
14	-6376.	1064.	-3425.	-1048.	14592.	1107.	1580.	339.	5.	246.	-38.	-80.	438.	-12.	-65.	0.	262.	-113.
SIGMA		513.		764.		749.		413.		204.		57.		87.		76.		131.

TABLE IVb

M0	M1C	M1S	M2C	M2S	M3C	M3S	M4C	M4S
-.7527525E-02	-.1619461E-01	.4601134E-02	.1066438E-02	.2484280E-02	-.9375555E-04	.6277080E-03	-.3072305E-03	.1411232E-03
-.3905665E-01	.4156749E00	.1010472QE00	-.2001035E-01	-.7982955E-01	.5228331E-02	-.5840125E-03	.8750181E-02	.5991535E-02
.1236559E00	-.1657898E00	.3450888E00	.6757054E-01	.2738382E-01	-.4891815E-03	.2557041E-02	-.6959268E-02	-.3292855E-03

TABLE IVc

PSI	M0	dM/dT1C	dM/dT1S
0.	-.2305625E-01	.3705E594E00	.1360663E-01
20.	-.1817515E-01	.3266E589E00	.1536933QE00
40.	-.1341615E-01	.2695E800E00	.2682379ZE00
60.	-.9896515E-02	.1823780E00	.3381867AE00
80.	-.6783705E-02	.1292513GE00	.3757020GE00
100.	-.2771215E-02	.5242066E-01	.4092340GE00
120.	.2051657E-02	-.7619277E-01	.4461914AE00
140.	.6311358E-02	-.2209118AE00	.4636380QE00
160.	.8881290E-02	-.3710089E00	.4354107ZE00
180.	.9519588E-02	-.4712396E00	.3549678AE00
200.	.8118939E-02	-.5211706E00	.2294880SE00
220.	.4298488E-02	-.5031729E00	.6929291E-01
240.	-.1859275E-02	-.3978579E00	-.1035057E00
260.	-.9228375E-02	-.2186912E00	-.2468588E00
280.	-.1627675E-01	-.1774826E-01	-.3186997E00
300.	-.2192445E-01	.1560060GE00	-.3075113E00
320.	-.2540825E-01	.2815837QE00	-.2335288E00
340.	-.2588156E-01	.3560958ZE00	-.1215402E00

Table IV. (Continued)

TEST 12 BLADE 2 r/R = .247

TABLE IVa (CONTINUED)

N	H0	DEL	H1C	DEL	H1S	DEL	H2C	DEL	H2S	DEL	H3C	DEL	H3S	DEL	H4C	DEL	H4S	DEL
1	-9305.	88.	-8468.	-84.	3837.	401.	1156.	28.	1235.	-13.	558.	197.	512.	-956.	105.	164.	432.	116.
2	-18869.	590.	13467.	756.	-2646.	526.	-3412.	-48.	-2550.	890.	312.	227.	-116.	260.	606.	-230.	456.	566.
3	-19002.	-8.	-275.	732.	-167.	210.	-720.	53.	-419.	34.	162.	-75.	354.	17.	102.	-8.	202.	167.
4	-16314.	-1682.	4353.	-1323.	-7173.	-2012.	-4347.	-1678.	-3825.	-1946.	-472.	-501.	-1577.	-1963.	16.	-269.	-1245.	-1192.
5	-11257.	184.	-2155.	-628.	1371.	257.	-325.	66.	150.	463.	225.	30.	432.	50.	-14.	-101.	102.	34.
6	-12112.	-199.	1245.	236.	1063.	-286.	-881.	-115.	-676.	247.	167.	-10.	340.	100.	153.	18.	225.	74.
7	-13233.	14.	4071.	118.	-642.	100.	-918.	819.	-1521.	231.	205.	150.	284.	254.	284.	65.	283.	226.
8	-11745.	-76.	-427.	493.	45.	-819.	-1355.	-795.	-264.	225.	252.	43.	484.	186.	171.	58.	367.	-16.
9	-13713.	93.	2504.	317.	-5050.	-406.	-1454.	590.	-1467.	-337.	140.	-14.	914.	764.	81.	-117.	-913.	-311.
10	-15065.	861.	2457.	-520.	-9816.	1936.	-2519.	984.	-802.	395.	288.	116.	250.	186.	271.	9.	916.	587.
11	-11148.	170.	-1435.	754.	707.	-504.	-875.	-572.	-74.	137.	204.	5.	423.	17.	67.	-11.	358.	172.
12	-11435.	-496.	-454.	131.	2868.	-470.	-122.	-36.	-329.	270.	143.	-50.	393.	58.	168.	70.	238.	14.
13	-9792.	47.	-158.	-516.	8866.	485.	1079.	460.	-1124.	-257.	170.	-28.	388.	60.	88.	15.	225.	-93.
14	-8711.	410.	967.	-471.	12722.	981.	1350.	282.	-1487.	-339.	157.	-41.	165.	-109.	-92.	-161.	289.	-93.
SIGMA		565.		599.		905.		654.		627.		160.		482.		122.		388.

TABLE IVb (CONTINUED)

H0	H1C	H1S	H2C	H2S	H3C	H3S	H4C	H4S
-.7705325E-02	-.1334754E-01	.5751138E-02	.2245811E-02	.2220038E-02	.2853724E-03	.1005497E-02	-.1578035E-03	.4200503E-03
-.7441889E-01	.4158362E00	.2613446E-01	-.5880211E-01	-.9268546E-01	-.2864590E-02	-.2156429E-01	.7598862E-02	-.4367346E-02
.1159419980E00	-.1000957E00	.5470159E00	.7841973E-01	.1788421E-01	.1516659E-02	.6888863E-02	-.4257889E-02	.9100590E-02

TABLE IVc (CONTINUED)

PSI	H0	dH/dT1C	dH/dT1S
0.	-.1867955E-01	.2870805 1E00	.9208483E-01
20.	-.1375338E-01	.1975402 0E00	.2278326 5E00
40.	-.1065706E-01	.1338266 7E00	.3065843 6E00
60.	-.9169006E-02	.1082428 6E00	.3359784 4E00
80.	-.7114776E-02	.7560140 5E-01	.3573219 9E00
100.	-.3172436E-02	-.1380955E-01	.3030466 4E00
120.	.1631611E-02	-.1009513 3E00	.4238427 3E00
140.	.5438008E-02	-.1905943 3E00	.6199143 2E00
160.	.7384673E-02	-.4533558 0E00	.3734051 7E00
180.	.7444852E-02	-.5384539 0E00	.2891228 2E00
200.	.5390455E-02	-.5616754 0E00	.1644009 8E00
220.	.9628693E-03	-.5024206 0E00	.2160593E-02
240.	-.5211986E-02	-.3585887 0E00	-.1635516 0E00
260.	-.1177986E-01	-.1696696 0E00	-.2797480 0E00
280.	-.1767936E-01	.4459039 0E-01	-.3165407 0E00
300.	-.2224796E-01	.2159481 0E00	-.2818343 0E00
320.	-.2443216E-01	.3230861 5E00	-.1940698 0E00
340.	-.2309076E-01	.3447326 3E00	-.6300461E-01

Table IV. (Continued)

TEST 12 BLADE 5 r/R = .217

TABLE IVa (CONTINUED)

N	M0	DEL	M1C	DEL	M1S	DEL	M2C	DEL	M2S	DEL	M3C	DEL	M3S	DEL	M4C	DEL	M4S	DEL
1	-9000.	280.	-9127.	88.	2267.	414.	420.	-235.	916.	-11.	228.	53.	573.	-48.	-116.	96.	455.	148.
2	-14067.	-0.	13629.	32.	-2194.	-133.	-2721.	-701.	-2820.	165.	400.	-22.	-20.	-124.	593.	61.	515.	42.
3	-12018.	-569.	-168.	442.	-831.	126.	-473.	58.	-556.	-44.	161.	-144.	363.	-59.	-27.	-100.	326.	-35.
4	-13763.	-11.	8262.	1288.	-5388.	-517.	-1963.	-196.	-2102.	-362.	544.	144.	300.	53.	449.	128.	467.	68.
5	-10922.	-11.	-2578.	-987.	553.	123.	-304.	-50.	-50.	327.	159.	-100.	485.	40.	27.	-16.	395.	-57.
6	-11712.	-512.	1251.	125.	727.	-269.	-556.	-120.	-1013.	-149.	323.	48.	336.	-47.	145.	8.	323.	-65.
7	-13011.	-683.	5004.	-277.	-107.	496.	-165.	884.	-1601.	-26.	252.	-80.	344.	50.	177.	-100.	407.	-7.
8	-11313.	-221.	-250.	484.	-616.	-897.	-869.	-514.	-692.	-168.	352.	84.	445.	10.	85.	11.	274.	-94.
9	-12983.	160.	3947.	580.	-5466.	-672.	-1409.	7.	-1286.	-179.	360.	-8.	396.	66.	178.	-20.	228.	-141.
10	-14363.	998.	3749.	-1650.	-10321.	1395.	-1932.	595.	-978.	298.	467.	-6.	329.	48.	232.	-18.	453.	112.
11	-11129.	-307.	-1431.	643.	50.	-419.	-617.	-413.	-238.	55.	209.	-45.	338.	-118.	24.	-3.	281.	-77.
12	-10653.	-374.	-508.	392.	2153.	-1010.	85.	42.	-666.	-92.	319.	89.	399.	-91.	46.	-27.	433.	47.
13	-8634.	386.	-1177.	-414.	8324.	456.	1031.	377.	-566.	162.	137.	-55.	569.	141.	45.	-45.	393.	-25.
14	-7297.	864.	-1000.	-737.	12228.	906.	1330.	265.	-892.	19.	156.	23.	420.	2.	159.	44.	528.	83.
SIGMA		488.		734.		667.		413.		184.		77.		72.		62.		82.

TABLE IVb (CONTINUED)

M0	M1C	M1S	M2C	M2S	M3C	M3S	M4C	M4S
-.7843335E-02	-.1412687E-01	.3604277E-02	.1357560E-02	.1753625E-02	.1062138E-03	.7289631E-03	-.3758664E-03	.2721362E-03
-.4678766E-01	.4147552E00	.7652847E-01	-.2903455E-01	-.7518099E-01	.2833371E-02	-.9522185E-02	.1426385E-01	.3989427E-02
.1167578700	-.1616801E00	.3317643E00	.5930045E-01	.1939194E-01	-.5585408E-02	.3817849E-02	-.4670099E-02	.8236414E-03

TABLE IVc (CONTINUED)

PSI	M0	dM/dT1C	dM/dT1S
0.	-.2088215-01	.3557005E00	.3922684E-02
20.	-.1683105-01	.2980006E00	.1365158E00
40.	-.1336105-01	.2194116200	.2461684300
60.	-.1109935-01	.1630341500	.3174849700
80.	-.8570005-02	.1174550300	.3616594E00
100.	-.4407405-02	.3261468E-01	.4000884E00
120.	.6737609E-03	-.1092876E00	.4360330BE00
140.	.4748396E-02	-.2679875E00	.4498397300
160.	.6821803E-02	-.3952499E00	.4197843E00
180.	.7158826E-02	-.4789071E00	.3388537700
200.	.5884152E-02	-.5198986E00	.2127835600
220.	.2492366E-02	-.4952263E00	.5547709E-01
240.	-.3003026-02	-.3789658E00	-.1064384E00
260.	-.9394145-02	-.1911658E00	-.2345410E00
280.	-.1525625-01	.6785927E-02	-.2973821E00
300.	-.1990815-01	.1676099600	-.2893089E00
320.	-.2289735-01	.2828699500	-.2257104E00
340.	-.2334955-01	.3509380E00	-.1235891E00

Table IV. (Continued)

TEST 12 BLADE 2 r/R = .596

TABLE IVa (CONTINUED)

N	M0	DEL	M1C	DEL	M1S	DEL	M2C	DEL	M2S	DEL	M3C	DEL	M3S	DEL	M4C	DEL	M4S	DEL
1	-1776.	10.	-709.	-58.	-665.	45.	630.	58.	973.	-66.	-17.	-19.	185.	99.	-494.	-232.	-520.	215.
2	-2663.	-89.	3271.	-6.	-1971.	-6.	-1053.	-133.	-525.	70.	326.	21.	343.	0.	-220.	-199.	1498.	227.
3	-2217.	-94.	834.	95.	-1525.	79.	-100.	-38.	470.	-0.	152.	19.	122.	-52.	-157.	-59.	-47.	-13.
4	-2502.	-38.	2100.	202.	-2415.	-161.	-755.	-57.	-66.	-86.	965.	-22.	287.	41.	143.	33.	631.	70.
5	-2053.	-0.	512.	-92.	-1086.	62.	31.	-36.	632.	135.	106.	1.	101.	23.	-205.	-36.	-112.	-16.
6	-2175.	-59.	1152.	38.	-1238.	-111.	-112.	-56.	306.	41.	75.	-55.	133.	-60.	-53.	140.	129.	-19.
7	-2317.	-20.	1717.	-115.	-1450.	49.	-262.	118.	-87.	-79.	97.	-99.	366.	121.	-77.	30.	426.	-65.
8	-2144.	-62.	829.	74.	-1393.	-107.	-252.	-263.	453.	17.	159.	43.	140.	-20.	-56.	104.	-96.	-71.
9	-2257.	98.	1391.	53.	-2206.	-150.	-448.	43.	206.	-2.	262.	36.	143.	-61.	211.	110.	201.	-49.
10	-2422.	201.	1262.	-229.	-3019.	328.	-707.	268.	344.	-43.	573.	36.	172.	-7.	421.	-39.	125.	-191.
11	-2237.	-200.	703.	185.	-1253.	-124.	-140.	-236.	539.	56.	68.	-91.	61.	-109.	-195.	47.	-72.	66.
12	-1995.	-4.	839.	24.	-819.	-105.	162.	-12.	429.	84.	67.	-11.	256.	48.	-215.	90.	56.	47.
13	-1710.	144.	855.	-132.	182.	120.	673.	256.	82.	-84.	98.	78.	249.	31.	-604.	47.	84.	-11.
14	-1642.	122.	1144.	-41.	791.	170.	662.	89.	-36.	-40.	-19.	-0.	177.	-52.	-759.	-45.	3.	-190.
SIGMA		104.		117.		144.		150.		68.		43.		69.		106.		118.

TABLE IVb (CONTINUED)

M0	M1C	M1S	M2C	M2S	M3C	M3S	M4C	M4S
-.1559479E-02	-.1576988E-02	-.2714829E-03	.9431656E-03	.1353280E-02	-.7672729E-04	.3399534E-04	-.9454136E-03	-.1133129E-02
-.9878205E-02	.7743430E-01	.1649680E-02	-.1027677E-01	-.3500636E-01	.3640432E-02	.5133002E-02	-.9209413E-02	.3710136E-01
.1472343E-01	-.1991466E-01	.5926494E-01	.2681274E-01	.7179726E-03	-.6000886E-02	-.4902504E-03	-.1680556E-01	-.8715015E-02

TABLE IVc (CONTINUED)

PSI	M0	dM/dT1C	dM/dT1S
0.	-.2615426E-02	.4871140E-01	-.2837209E-03
20.	-.2726906E-02	.6851638E-01	.2327424E-01
40.	-.1440009E-02	.5103700E-01	.5016746E-01
60.	-.6518705E-03	-.2465628E-01	.6581191E-01
80.	-.2051015E-02	-.2120064E-01	.4094187E-01
100.	-.3962467E-02	.2720044E-01	.2980648E-01
120.	-.3534935E-02	.3024040E-01	.5036845E-01
140.	-.9919895E-03	-.4044926E-01	.8668484E-01
160.	.8055861E-03	-.1089023E00	.8107484E-01
180.	.6919926E-03	-.1134381E00	.4956514E-01
200.	.4610123E-03	-.9067113E-01	.2514140E-01
220.	.1189122E-02	-.9496706E-01	.6705983E-02
240.	.1241771E-02	-.9766526E-01	-.2994415E-01
260.	-.9872815E-03	-.1000052E-01	-.7607735E-01
280.	-.3840648E-02	.5610501E-01	-.8833035E-01
300.	-.4488832E-02	.9753832E-01	-.5317625E-01
320.	-.3040506E-02	.6353651E-01	-.1162455E-01
340.	-.2107396E-02	.3024860E-01	-.1732326E-03

Table IV. (Continued)

TEST 15 BLADE 1 r/R = .217

TABLE IVa (CONTINUED)

N	M0	DEL	M1C	DEL	M1S	DEL	M2C	DEL	M2S	DEL	M3C	DEL	M3S	DEL	M4C	DEL	M4S	DEL
1	-8337.	416.	-1774.	-50.	1737.	127.	-231.	-70.	156.	25.	432.	-37.	364.	95.	60.	76.	-38.	7.
2	-8859.	-321.	-132.	1035.	1594.	-765.	-150.	-160.	-105.	-106.	404.	-91.	292.	27.	-17.	-51.	-160.	-64.
3	-6714.	-201.	-10115.	-327.	5562.	275.	955.	-24.	648.	-1181.	272.	-5.	536.	-112.	-243.	-289.	744.	226.
4	-8471.	-215.	-1545.	709.	2208.	-591.	-259.	-409.	304.	74.	500.	32.	226.	-89.	-13.	-52.	-61.	-41.
5	-8603.	-139.	-1806.	131.	1762.	-523.	67.	51.	274.	35.	472.	3.	376.	81.	7.	-0.	-30.	0.
6	-7654.	-211.	-7432.	324.	2332.	-1034.	46.	-397.	1707.	381.	257.	-50.	713.	181.	-29.	-9.	299.	-99.
7	-6579.	-132.	-11534.	560.	4576.	-201.	616.	-299.	2383.	46.	100.	-13.	719.	-5.	47.	68.	646.	-53.
8	-9468.	-801.	320.	1438.	1085.	-939.	123.	178.	94.	99.	409.	7.	253.	-3.	-43.	-60.	-228.	-132.
9	-10700.	61.	5451.	-287.	-1492.	76.	-1670.	-510.	-2050.	-610.	648.	-5.	-27.	49.	-191.	-60.	-467.	101.
10	-8751.	-763.	-2706.	445.	2037.	-1223.	377.	87.	617.	109.	495.	67.	458.	80.	26.	-23.	-37.	-70.
11	-10747.	127.	-1849.	70.	-4416.	-201.	-1472.	137.	357.	96.	413.	22.	174.	20.	-324.	10.	10.	-34.
12	-12763.	689.	-1031.	-1270.	-8968.	1008.	-2803.	454.	141.	256.	422.	47.	-117.	-56.	-458.	183.	15.	54.
13	-8390.	387.	-1869.	-786.	2092.	970.	-47.	103.	199.	198.	474.	-14.	69.	-181.	-139.	-128.	-92.	-1.
14	-6574.	103.	-3783.	-637.	7626.	800.	1680.	500.	441.	77.	490.	-2.	333.	-100.	369.	127.	102.	105.
15	-2523.	1012.	-9597.	-1378.	15472.	1023.	3413.	341.	1722.	360.	496.	66.	782.	12.	758.	203.	292.	1.
SIGMA		472.		773.		881.		301.		386.		40.		91.		119.		88.

TABLE IVc (CONTINUED)

M0	M1C	M1S	M2C	M2S	M3C	M3S	M4C	M4S
-.8880516-02	-.243431E-01	.1178166E-01	.2639309E-02	.4742176E-02	.2689600E-03	.1449061E-02	.1112600E-03	.1428846E-02
-.3727746-01	.5211403E00	.5444363E-01	-.7908436-03	-.1139203E00	.1603838E-01	-.1832539E-01	.1177794E-01	-.4006426-01
.2099119400	-.2277976E00	.5025072700	.1316867600	.4201495E-01	-.4438096-03	.1910925E-01	.2330219E-01	.1084289E-01

TABLE IVb (CONTINUED)

PSI	M0	dM/dT1C	dM/dT1S
0.	-.3020406-01	.5108884GE00	.13665961E00
20.	-.1977166-01	.3519615400	.32665614E00
40.	-.1319376-01	.2359483300	.4212607800
60.	-.9450526-02	.1849491900	.4811624500
80.	-.6388946-02	.1112404900	.5504069500
100.	.2027346E-02	-.2729076-01	.6142757500
120.	.9691676E-02	-.1761910E00	.6540606200
140.	.1405342E-01	-.2946620500	.6776327100
160.	.1670883E-01	-.4181362E00	.6798696900
180.	.1794432E-01	-.5634600E00	.5931623200
200.	.1500375E-01	-.6400016E00	.3783859900
220.	.6657908E-02	-.5846977E00	.9069390E-01
240.	-.5322306-02	-.3984135E00	-.1625159E00
260.	-.1675516-01	-.1920846E00	-.3275716E00
280.	-.2688536-01	-.1312336-02	-.4210415E00
300.	-.3594226-01	.2185725500	-.4432173E00
320.	-.4142456-01	.4494819400	-.3480386E00
340.	-.3938816-01	.5718243700	-.1255470E00

Table IV. (Continued)

TEST 13 BLADE 2 r/R = .217

TABLE IVa (CONTINUED)

N	M0	DEL	M1C	DEL	M1S	DEL	M2C	DEL	M2S	DEL	M3C	DEL	M3S	DEL	M4C	DEL	M4S	DEL
1	-8082.	219.	-103.	-21.	-342.	-246.	-1084.	-91.	-426.	-36.	306.	-39.	248.	108.	-64.	-1.	23.	105.
2	-9275.	-253.	1416.	893.	-212.	-770.	-1143.	-256.	-585.	-30.	438.	-57.	166.	41.	-46.	-32.	-256.	-105.
3	-6686.	129.	-7774.	-356.	4002.	-246.	794.	-93.	-54.	-969.	222.	-76.	435.	-89.	-408.	-473.	663.	227.
4	-9091.	-372.	203.	674.	305.	-786.	-1201.	-554.	-475.	-100.	319.	-132.	110.	-66.	-96.	-96.	-66.	14.
5	-9403.	-476.	4462.	-154.	99.	-480.	-679.	117.	-353.	27.	320.	-124.	274.	113.	-36.	-9.	39.	119.
6	-8072.	-315.	-5486.	102.	1202.	-1006.	45.	-136.	932.	268.	337.	31.	502.	86.	37.	61.	235.	-105.
7	-6862.	-195.	-9276.	804.	4135.	128.	840.	-213.	1577.	168.	350.	142.	562.	-54.	167.	155.	593.	-45.
8	-9962.	-819.	1593.	1058.	-927.	-1161.	-1010.	-38.	-205.	334.	488.	24.	43.	-76.	-151.	-118.	-310.	-166.
9	-11118.	212.	9185.	-530.	-3525.	376.	-2731.	-53.	-1988.	-377.	652.	84.	-203.	-80.	-330.	-162.	-446.	122.
10	-8844.	-408.	-806.	474.	730.	-893.	-491.	-65.	-321.	-87.	350.	-87.	143.	-76.	-50.	-76.	-206.	-182.
11	-11314.	-149.	-889.	9.	-5621.	-9.	-2134.	195.	202.	101.	305.	28.	138.	55.	-380.	10.	8.	-126.
12	-12780.	864.	-471.	-969.	-10195.	1092.	-3641.	449.	390.	223.	103.	-70.	-97.	-16.	-590.	151.	300.	121.
13	-8703.	453.	308.	-190.	820.	872.	-1071.	-29.	-471.	44.	716.	261.	164.	48.	146.	106.	-219.	-86.
14	-7129.	88.	-1159.	-264.	5476.	464.	522.	115.	-438.	73.	560.	29.	220.	-39.	503.	282.	-95.	51.
15	-3085.	1021.	-6222.	-1220.	14289.	2086.	3342.	652.	304.	360.	533.	-35.	598.	44.	682.	110.	75.	58.
SIGMA		486.		620.		930.		277.		317.		101.		71.		175.		121.

TABLE IVb (CONTINUED)

M0	M1C	M1S	M2C	M2S	M3C	M3S	M4C	M4S
-.9230505E-02	-.1979411E-01	.1092438E-01	.3221975E-02	.2856431E-02	.3495249E-03	.1250239E-02	.2063376E-03	.1257967E-02
-.5421895E-01	.5047452E00	-.3072555E-02	-.5317316E-01	-.1068161E00	.1655052E-01	-.2152023E-01	.8469512E-02	-.4345615E-01
.2037336E00	-.1646672E00	.5016368IE00	.1462445ZE00	.5964150E-02	.6570502E-02	.1532876E-01	.2645514E-01	.9435967E-03

TABLE IVc (CONTINUED)

PSI	M0	dM/dT1C	dM/dT1S
0.	-.2515385E-01	.4223526ZE00	.2185366BF00
20.	-.1711707E-01	.2579374ZE00	.3587019BE00
40.	-.1278355E-01	.1662888ME00	.4169119GE00
60.	-.1029096E-01	.1464140QE00	.4673579IE00
80.	-.5851906E-02	.8861630E-01	.5300030ZE00
100.	.1003035E-02	-.5202306E-01	.5977266GE00
120.	.7331886E-02	-.2154701E00	.6362702ZE00
140.	.1126327E-01	-.3503350E00	.6630682ZE00
160.	.1335587E-01	-.4842755E00	.6517027HE00
180.	.1354037E-01	-.6201175E00	.5343299BE00
200.	.9867541E-02	-.6678090E00	.2915386HE00
220.	.1540252E-02	-.5492193E00	.4018721E-02
240.	-.8821076E-02	-.3198876E00	-.2238944E00
260.	-.1801166E-01	-.1013445E00	-.3608881E00
280.	-.2554006E-01	.7459309E-01	-.4274441E00
300.	-.3198986E-01	.2614752ZE00	-.4101784E00
320.	-.3547976E-01	.4476214AE00	-.2669226E00
340.	-.3295876E-01	.5202227IE00	-.2051396E-01

Table IV. (Continued)

TEST 13 BLADE 3 r/R = .217

TABLE IVa (CONTINUED)

N	M0	DEL	M1C	DEL	M1S	DEL	M2C	DEL	M2S	DEL	M3C	DEL	M3S	DEL	M4C	DEL	M4S	DEL
1	-8886.	95.	385.	-102.	-874.	12.	-897.	25.	-540.	209.	386.	-55.	339.	138.	194.	172.	10.	92.
2	-9082.	-310.	1859.	836.	-701.	-510.	-635.	154.	-1080.	-202.	394.	-57.	324.	108.	110.	42.	-236.	-122.
3	-6956.	-91.	-7224.	-197.	3348.	335.	377.	73.	-620.	-1137.	362.	67.	348.	-159.	-106.	-236.	686.	230.
4	-8757.	-251.	284.	273.	-396.	-675.	-808.	-173.	-869.	-191.	421.	-10.	195.	-60.	-119.	-199.	-102.	-55.
5	-8942.	-231.	-71.	-282.	-571.	-348.	-323.	436.	-506.	206.	458.	23.	247.	15.	130.	76.	-88.	-26.
6	-8002.	-252.	-,722.	441.	268.	-806.	-448.	-227.	461.	95.	270.	-55.	406.	102.	80.	31.	200.	-89.
7	-6760.	51.	-9997.	219.	2571.	-56.	319.	4.	1221.	51.	283.	29.	600.	62.	111.	34.	552.	-3.
8	-9566.	-670.	1161.	1099.	-1080.	-564.	-546.	318.	-743.	138.	650.	-7.	172.	-31.	104.	54.	-294.	-176.
9	-10443.	415.	1154.	-276.	-3971.	305.	-2264.	-257.	-2858.	-733.	709.	134.	-133.	-39.	-199.	-123.	-400.	142.
10	-8027.	-674.	,275.	547.	-216.	-980.	-539.	-51.	-506.	10.	692.	77.	189.	-102.	104.	10.	-55.	-63.
11	-11000.	20.	-111.	-25.	-6569.	-96.	-2040.	139.	-373.	231.	673.	36.	-83.	-77.	-373.	-79.	-211.	-130.
12	-12747.	742.	1075.	-932.	-11538.	1149.	-3825.	-147.	-524.	371.	875.	-5.	-259.	24.	-475.	134.	-177.	49.
13	-8062.	40.	1238.	189.	-367.	639.	-1221.	-291.	-843.	31.	289.	-163.	191.	-1.	-51.	-85.	22.	140.
14	-6924.	68.	-1663.	-942.	4752.	561.	551.	263.	-60.	527.	346.	-68.	446.	26.	341.	55.	43.	28.
15	-2949.	1047.	-6159.	-845.	12403.	1232.	1818.	-267.	640.	392.	370.	69.	780.	-6.	718.	111.	322.	-16.
SIGMA		449.		591.		650.		222.		420.		70.		79.		115.		110.

TABLE IVb (CONTINUED)

M0	M1C	M1S	M2C	M2S	M3C	M3S	M4C	M4S
-.958423E-02	-.191826E-01	.84110755E-02	.16100706-02	.26648246-02	.35119156-03	.11330686-02	.29665466-03	.11869266-02
-.334711E-01	.49302081E00	.28754826-01	-.156772E-01	-.10102476E00	.93149616-02	-.9202236-02	.87206246-02	-.31590356-01
.20072562E00	-.2011645E00	.49324767E00	.12139020E00	.3377788E-01	-.4233946-02	.23087486-01	.24881506-01	.14859596-01

TABLE IVc (CONTINUED)

PSI	M0	dM/dT1C	dM/dT1S
0.	-.2650896-01	.46190811E00	.14119886E00
20.	-.1940966-01	.32970682E00	.33185408E00
40.	-.1503566-01	.22884963E00	.42221046E00
60.	-.1191606-01	.17197300E00	.47499003E00
80.	-.6026066-02	.90936356-01	.54035536E00
100.	-.2007666-03	-.4247976-01	.60198336E00
120.	.5409205E-02	-.1821539E00	.63491926E00
140.	.8644196E-02	-.2965982E00	.64948446E00
160.	.1052703E-01	-.4139085E00	.64146596E00
180.	.1115390E-01	-.5427634E00	.55199576E00
200.	.8574601E-02	-.6008246E00	.33676775E00
220.	.1029396E-02	-.5382148E00	.5208208E-01
240.	-.6599416-02	-.3522227E00	-.1866436E00
260.	-.1451696-01	-.1435477E00	-.3255335E00
280.	-.2182716-01	.4685496E-01	-.3951656E00
300.	-.2904426-01	.26243217E00	-.4121071E00
320.	-.3387186-01	.42841082E00	-.3285790E00
340.	-.3288936-01	.51816175E00	-.1182234E00

Table IV. (Continued)

TEST 13 BLADE 2 r/R = .596

TABLE IVa (CONTINUED)

H	H0	DEL	H1C	DEL	H1S	DEL	H2C	DEL	H2S	DEL	H3C	DEL	H3S	DEL	H4C	DEL	H4S	DEL
1	-2157.	-52.	680.	31.	-1081.	52.	-406.	-106.	336.	-38.	146.	-37.	269.	127.	-345.	123.	-283.	-125.
2	-2095.	-16.	990.	214.	-1142.	-151.	-277.	-71.	300.	-1.	201.	6.	159.	4.	-466.	-51.	-366.	-138.
3	-1790.	-48.	-781.	86.	-375.	-99.	479.	30.	671.	-216.	-75.	-67.	145.	-88.	-910.	-574.	821.	253.
4	-2088.	-55.	650.	79.	-988.	-102.	-365.	-247.	367.	-5.	190.	21.	64.	-102.	-500.	-102.	-186.	-57.
5	-2095.	-31.	497.	-106.	-1140.	-147.	-150.	21.	355.	-18.	181.	6.	192.	36.	-450.	-21.	-145.	-2.
6	-1913.	-29.	-458.	52.	-886.	-194.	48.	-147.	890.	94.	87.	47.	169.	-22.	-354.	80.	327.	-79.
7	-1711.	6.	-1329.	10.	-340.	5.	505.	-15.	1064.	-29.	-49.	13.	270.	41.	-201.	199.	843.	35.
8	-2188.	-91.	1031.	253.	-1324.	-265.	-131.	105.	440.	130.	265.	69.	89.	-60.	-471.	-37.	-446.	-220.
9	-2343.	87.	1995.	-59.	-1836.	45.	-816.	43.	-230.	-121.	367.	9.	36.	-26.	-661.	-85.	-520.	313.
10	-2103.	-113.	424.	21.	-972.	-191.	-00.	-53.	411.	-16.	171.	23.	173.	-4.	-384.	-1.	-163.	-113.
11	-2350.	48.	512.	47.	-2264.	37.	-657.	45.	684.	73.	198.	18.	51.	21.	-845.	2.	-182.	-166.
12	-2629.	140.	495.	-246.	-3263.	348.	-1129.	194.	734.	58.	228.	-5.	-44.	14.	-1031.	199.	62.	161.
13	-2175.	-62.	734.	-35.	-975.	144.	-312.	-52.	285.	-36.	121.	-75.	140.	-9.	-558.	-105.	-248.	-28.
14	-1830.	-22.	408.	-84.	-21.	43.	318.	67.	302.	10.	89.	-58.	276.	30.	-17.	133.	-58.	67.
15	-1101.	238.	610.	-264.	1805.	474.	1311.	245.	552.	116.	58.	33.	477.	33.	448.	247.	331.	98.
SIGMA		90.		137.		197.		126.		87.		40.		55.		190.		159.

TABLE IVb (CONTINUED)

H0	H1C	H1S	H2C	H2S	H3C	H3S	H4C	H4S
-.258310E-02	-.295846E-02	.2817441E-03	.1391054E-02	.2010893E-02	-.200931E-03	.4701941E-03	-.465375E-03	.1677247E-02
-.860713E-02	.10502335E00	.3333568E-02	-.208705E-01	-.442158E-01	.1218418E-01	-.249251E-03	.1034005E-01	-.529846E-01
.3058873E-01	-.350188E-01	.1043942E00	.5175497E-01	-.596761E-03	-.553838E-02	.1024593E-01	.2947934E-01	.1217008E-01

TABLE IVc (CONTINUED)

PSI	H0	dH/dT1C	dH/dT1S
0.	-.481681E-02	.9807892E-01	.7326584E-01
20.	-.103091E-02	.2307246E-02	.9770664E-01
40.	-.927787E-03	-.733470E-02	.6884313E-01
60.	-.379130E-02	.4746198E-01	.5827428E-01
80.	-.518011E-02	.5351148E-01	.8739251E-01
100.	-.357289E-02	-.864879E-02	.10937521E00
120.	-.181259E-02	-.483809E-01	.10232915E00
140.	-.170409E-02	-.327238E-01	.10674307E00
160.	-.115858E-02	-.460542E-01	.14209689E00
180.	.1501966E-02	-.1363361E00	.15018023E00
200.	.3722982E-02	-.2091048E00	.7620530E-01
220.	.2227299E-02	-.1599095E00	-.379449E-01
240.	-.172269E-02	-.389669E-01	-.1004439E00
260.	-.409411E-02	.2222388E-01	-.943716E-01
280.	-.413994E-02	.8643698E-02	-.842465E-01
300.	-.485718E-02	.2650021E-01	-.1002752E00
320.	-.721238E-02	.11214326E00	-.901438E-01
340.	-.792672E-02	.16166069E00	-.145914E-01

Table IV. (Continued)

TEST 14 BLADE 1 r/R = .217

TABLE IVa (CONTINUED)

N	M0	DEL	M1C	DEL	M1S	DEL	M2C	DEL	M2S	DEL	M3C	DEL	M3S	DEL	M4C	DEL	M4S	DEL
1	-696.	1948.	-4488.	-36.	3544.	-727.	4293.	-785.	2798.	1609.	2062.	33.	922.	366.	-45.	21.	319.	-37.
2	-2745.	-1342.	-8299.	92.	4749.	-809.	10082.	79.	2375.	1407.	3064.	210.	515.	205.	-52.	-41.	372.	206.
3	-4619.	-735.	-8098.	55.	2384.	-755.	-1076.	-551.	1903.	1079.	1052.	-7.	1001.	257.	-31.	92.	424.	-148.
4	-5191.	-426.	-964.	-195.	1712.	-514.	-4545.	-508.	2418.	1447.	565.	95.	669.	-249.	-149.	13.	983.	276.
5	-6348.	-122.	1263.	91.	-307.	-872.	-8925.	263.	3323.	1539.	-19.	349.	1558.	296.	21.	246.	1272.	365.
6	-4668.	401.	-2285.	328.	2516.	1594.	-646.	212.	1090.	-3691.	821.	-386.	852.	-493.	-245.	-81.	235.	-356.
7	-6472.	-52.	-2456.	-361.	-554.	608.	-2367.	841.	7058.	-548.	1053.	98.	1636.	-230.	-71.	145.	885.	199.
8	-4476.	-454.	-639.	339.	2650.	-755.	-4515.	-1627.	374.	1081.	331.	-247.	1114.	494.	-761.	-627.	433.	-227.
9	-3385.	577.	-1129.	-88.	4363.	883.	-1756.	952.	-2443.	-1678.	443.	-169.	520.	-85.	-199.	-68.	146.	-507.
10	-852.	204.	-3033.	-223.	9028.	1347.	4709.	1125.	-8024.	-2246.	1439.	26.	-978.	-564.	283.	299.	631.	228.
SIGMA		841.		217.		941.		826.		1821.		205.		355.		242.		283.

TABLE IVb (CONTINUED)

M0	M1C	M1S	M2C	M2S	M3C	M3S	M4C	M4S
.4704042E-03	-.3402485E-01	.2899664E-01	.6224201E-01	.2201232E-02	.1500967E-01	-.2172695E-04	.2207652E-03	-.2430005E-03
-.1627891E00	.5078672E00	-.6060606E-01	-.1125343E01	-.3817903E00	-.2108292E00	-.7855585E-02	-.8888892E-02	.4280371E-01
.4261436ZE00	-.2722057E00	.6104683AE00	.9470731GE00	-.7140217E00	.1237973BE00	-.1468424E00	.1888939E-01	-.3763497E-01

TABLE IVc (CONTINUED)

PSI	M0	dM/dT1C	dM/dT1S
0.	.4391438E-01	-.9995730E00	.1241077BE01
20.	.3448383E-01	-.8852804E00	.5462046?E00
40.	-.2374?6E-02	-.2628652E00	-.1466744E00
60.	-.3633576-01	.4486?871E00	-.3729249E00
80.	-.4266506-01	.8708167?E00	-.516388E-01
100.	-.1765556-01	.7997?717E00	.6067?650E00
120.	.2347856E-01	.2545?191E00	.1318511?E01
140.	.6060000E-01	-.5291062E00	.1826411GE01
160.	.8107553E-01	-.1222434E01	.19262296E01
180.	.8105197E-01	-.1593668E01	.1538?145E01
200.	.6424517E-01	-.1573884E01	.7709282?E00
220.	.2868665E-01	-.1160287E01	-.1361449E00
240.	-.209527E-01	-.3758637E00	-.9103867E00
260.	-.7121466-01	.5893?617E00	-.1289997E01
280.	-.9986036-01	.1292?664E01	-.1068328E01
300.	-.8923416-01	.1289?898E01	-.2587509E00
320.	-.4262706-01	.5513552?E00	.7549531?E00
340.	.1295100E-01	-.4237039E00	.1375?132E01

Table IV. (Continued)

TEST 14 BLADE 2 r/R = .217

TABLE IVa (CONTINUED)

N	M0	DEL	M1C	DEL	M1S	DEL	M2C	DEL	M2S	DEL	M3C	DEL	M3S	DEL	M4C	DEL	M4S	DEL
1	-903.	534.	-3524.	85.	1833.	-956.	3750.	-922.	3972.	2039.	1720.	-485.	975.	670.	37.	81.	400.	-124.
2	59.	-356.	-3765.	160.	3897.	93.	10386.	1485.	2165.	602.	3182.	171.	381.	-75.	-114.	-207.	517.	6.
3	-5244.	-1703.	-1064.	-176.	714.	-1221.	-391.	-609.	3339.	1585.	1341.	135.	920.	799.	108.	300.	527.	18.
4	-5362.	-1101.	57.	-708.	-74.	-1290.	-4778.	-1479.	4212.	2204.	687.	57.	897.	884.	-324.	-35.	946.	429.
5	-5514.	1285.	4222.	1117.	890.	1019.	-4443.	3144.	2850.	-112.	-180.	-45.	-1557.	-1422.	-558.	-120.	395.	-163.
6	379.	4060.	584.	1869.	2093.	2151.	827.	479.	981.	-4630.	2513.	833.	-3143.	-3328.	-402.	-156.	990.	295.
7	-6948.	-2374.	-2037.	-1475.	-1982.	-112.	-1336.	-298.	8682.	235.	1092.	-568.	1657.	1493.	-145.	198.	590.	-239.
8	-5159.	-736.	55.	-398.	1207.	-1040.	-4653.	-1962.	2045.	1708.	557.	-42.	1091.	1074.	-526.	-288.	402.	-36.
9	-4301.	54.	-56.	-431.	2140.	-169.	-3442.	-894.	-840.	-1114.	683.	61.	1030.	1008.	-140.	92.	298.	-137.
10	-1035.	337.	-1962.	-43.	7440.	1525.	2813.	1057.	-7317.	-2508.	900.	-117.	-978.	-1104.	132.	136.	149.	-48.
SIGMA		1701.		885.		1143.		1469.		2096.		364.		1435.		181.		198.

TABLE IVb (CONTINUED)

M0	M1C	M1S	M2C	M2S	M3C	M3S	M4C	M4S
.1029827E-01	-.3399398E-01	.1992160E-01	.5453512E-01	.3845713E-02	.1549232E-01	.2486224E-02	.1007398E-02	.1918589E-02
-.4214265E00	.5898570E00	-.2088466E-01	-.1066631E01	-.3366095E00	-.2421286E00	-.427766E-01	-.261478E-01	-.174742E-01
.3585461?E00	-.3509411E00	.5230324E00	.6571691?E00	-.7255781E00	.6490279E-01	.1647551E-01	.3384896E-01	-.339487E-01

TABLE IVc (CONTINUED)

PSI	M0	dM/dT1C	dM/dT1S
0.	.4736331E-01	-.1166498E01	.7636260?E00
20.	.4140265E-01	-.1037619E01	.2638669?E00
40.	.4454981E-02	-.3971116E00	-.2362263E00
60.	-.3102?87E-01	.3675434?E00	-.3733957E00
80.	-.3627?4E-01	.6969197?E00	-.518986E-01
100.	-.914757E-02	.4577335?E00	.5875657?E00
120.	.3058790E-01	-.1537908E00	.1305288?E01
140.	.6310509E-01	-.8679766E00	.1818681?E01
160.	.8102985E-01	-.1486865E01	.1858168?E01
180.	.8431827E-01	-.1861912E01	.1335702?E01
200.	.7181924E-01	-.1865642E01	.4722060?E00
220.	.4207509E-01	-.1441981E01	-.3345843E00
240.	-.579437E-03	-.6703763E00	-.7985674E00
260.	-.4391?1E-01	.2169868?E00	-.8667513E00
280.	-.713691E-01	.8717533?E00	-.6008536E00
300.	-.6887?8E-01	.9564753?E00	-.813768E-01
320.	-.3434?0E-01	.3787727?E00	.5151722?E00
340.	.1474638E-01	-.5320881E00	.8772066?E00

Table IV. (Continued)

TEST 14 BLADE 3 r/t = .217

TABLE IVa (CONTINUED)

N	M0	DEL	M1C	DEL	M1S	DEL	M2C	DEL	M2S	DEL	M3C	DEL	M3S	DEL	M4C	DEL	M4S	DEL
1	-8604.	-2677.	-3222.	142.	1032.	-1008.	2277.	-910.	3048.	1028.	1535.	-190.	1080.	349.	12.	99.	334.	-15.
2	-7117.	-1076.	-5378.	-5.	3567.	-498.	8179.	-27.	3360.	1194.	2803.	249.	699.	186.	-238.	-127.	409.	170.
3	-5139.	412.	-671.	293.	515.	-812.	-2768.	-250.	4130.	2216.	1204.	446.	1124.	208.	29.	81.	471.	-3.
4	-5695.	-230.	749.	279.	-516.	-832.	-7254.	-1159.	3675.	1461.	207.	125.	1183.	105.	-81.	-47.	861.	309.
5	-8301.	-2723.	2371.	-93.	-1936.	-471.	-10794.	555.	4452.	1729.	-478.	168.	1421.	31.	155.	171.	884.	217.
6	-4999.	2118.	-1308.	251.	918.	1657.	-2219.	669.	1572.	-4067.	759.	-216.	920.	-512.	-55.	43.	347.	-136.
7	-6719.	1429.	-1639.	-534.	-2215.	562.	-4552.	754.	7937.	-337.	647.	-121.	1618.	-266.	-47.	73.	464.	-73.
8	-4894.	-51.	357.	54.	848.	-613.	-6206.	-1294.	1075.	629.	126.	-126.	1068.	246.	-441.	-421.	379.	-146.
9	-4007.	820.	271.	31.	2140.	602.	-4486.	242.	-2243.	-2535.	114.	-165.	1153.	345.	-145.	-125.	203.	-318.
10	-1105.	1979.	-1867.	-417.	7136.	1414.	3144.	1421.	-6180.	-1919.	840.	-162.	-765.	-688.	261.	254.	374.	-5.
SIGMA		1646.		268.		929.		855.		2032.		218.		345.		181.		178.

TABLE IVb (CONTINUED)

M0	M1C	M1S	M2C	M2S	M3C	M3S	M4C	M4S
-.239736E-01	-.303468E-01	.22A6909E-01	.5564723E-01	.7241832E-02	.1380787E-01	.8802522E-03	-.5402556-03	.4225417E-03
.1987124BE00	.5392164BE00	-.1096861E00	-.1143206E01	-.3721927E00	-.2171362E00	-.2692098E-02	.1079078E-01	.2485212E-01
.2460876SE00	-.2617401E00	.60946599E00	.97053336E00	-.6622558E00	.11169374E00	-.1281048E00	.3537542E-02	-.2146444E-01

TABLE IVc (CONTINUED)

PSI	M0	dM/dT1C	dM/dT1S
0.	.1459445E-01	-.6116139E00	.10701121E01
20.	.1060320E-01	-.5316154E00	.45074473E00
40.	-.212152E-01	.8085618E-01	-.2237774E00
60.	-.547975E-01	.81288764E00	-.5106403E00
80.	-.648878E-01	.12345695E01	-.2660620E00
100.	-.449511E-01	.11167095E01	.36194874E00
120.	-.864632E-02	.52710063E00	.10843707E01
140.	.2453397E-01	-.2463309E00	.16079974E01
160.	.4368646E-01	-.8983421E00	.17246178E01
180.	.4767227E-01	-.1255774E01	.13702050E01
200.	.3666060E-01	-.1248235E01	.63594627E00
220.	.8162057E-02	-.8168363E00	-.2727049E00
240.	-.364454E-01	.2924207E-01	-.1081139E01
260.	-.840593E-01	.10413828E01	-.1485765E01
280.	-.1128169E00	.17323311E01	-.1262944E01
300.	-.1062193E00	.16904328E01	-.4563829E00
320.	-.666924E-01	.94250420E00	.53366810E00
340.	-.167070E-01	-.2244346E-01	.11493857E01

Table IV. (Continued)

TEST 14 BLADE 2 r/R = .596

TABLE IVa (CONTINUED)

N	M0	DEL	M1C	DEL	M1S	DEL	M2C	DEL	M2S	DEL	M3C	DEL	M3S	DEL	M4C	DEL	M4S	DEL
1	-3552.	-1227.	331.	61.	-507.	-317.	1495.	-281.	1650.	681.	693.	-33.	395.	201.	-100.	-11.	297.	47.
2	-3067.	-555.	908.	-46.	86.	-81.	3492.	171.	1063.	308.	1119.	140.	67.	33.	-81.	-4.	305.	29.
3	-1673.	373.	143.	-32.	-726.	-207.	7.	36.	1384.	365.	512.	94.	370.	26.	-88.	8.	309.	93.
4	-1772.	140.	546.	35.	-1001.	-229.	-1163.	-32.	1742.	574.	210.	-27.	463.	6.	-53.	52.	158.	-39.
5	-3315.	-1535.	932.	-41.	-1338.	-121.	-2512.	191.	1900.	324.	111.	120.	677.	23.	-90.	31.	220.	44.
6	-1610.	657.	121.	116.	-569.	461.	12.	-152.	965.	-1312.	366.	-104.	435.	-120.	-167.	-40.	131.	-119.
7	-2008.	661.	-10.	-99.	-1430.	105.	-151.	215.	3148.	-90.	471.	-28.	617.	-152.	-100.	53.	255.	-8.
8	-1596.	183.	486.	1.	-537.	-48.	-1252.	-358.	988.	383.	238.	-4.	469.	132.	-195.	-105.	213.	25.
9	-1440.	340.	525.	55.	-360.	109.	-863.	-22.	97.	-484.	264.	14.	453.	124.	-150.	-60.	194.	5.
10	-737.	766.	64.	-48.	897.	327.	1008.	233.	-1932.	-747.	305.	-112.	-388.	-273.	35.	75.	101.	-77.
SIGMA		789.		62.		237.		200.		616.		92.		137.		53.		60.

TABLE IVb (CONTINUED)

M0	M1C	M1S	M2C	M2S	M3C	M3S	M4C	M4S
-.106496E-01	-.555415E-02	.2393387E-02	.2020284E-01	.1778117E-02	.4999796E-02	-.6429A7E-03	-.245542E-02	.1194246E-02
.8964139E-01	.1297680E00	-.281871E-01	-.3858049E00	-.874291E-01	-.720674E-01	.1453798E-01	.6277292E-03	-.977612E-02
.3722164E-01	-.559642E-01	.15141516E00	.24632904E00	-.2531386E00	.2651325E-01	-.647860E-01	.7209957E-02	-.123280E-02

TABLE IVc (CONTINUED)

PSI	M0	dM/dT1C	dM/dT1S
0.	.8756306E-02	-.2378964E00	.2613097E00
20.	.4648355E-02	-.1828187E00	.1959234E-01
40.	-.105218E-01	.6247952E-01	-.1913996E00
60.	-.258253E-01	.32749056E00	-.2310706E00
80.	-.305317E-01	.44724961E00	-.922684E-01
100.	-.232850E-01	.37737258E00	.12525303E00
120.	-.112858E-01	.18814784E00	.31423361E00
140.	-.133632E-02	-.294212E-01	.42028481E00
160.	.5443197E-02	-.222868AE00	.4261144 1E00
180.	.8859011E-02	-.3531751E00	.32021155E00
200.	.9557768E-02	-.3606157E00	.10689582E00
220.	.1019537E-02	-.1972541E00	-.1615873E00
240.	-.144200E-01	.1024704 1E00	-.3843387E00
260.	-.294317E-01	.41083378E00	-.4567612E00
280.	-.360404E-01	.57518501E00	-.3311386E00
300.	-.309820E-01	.51081102E00	-.570158E-01
320.	-.168042E-01	.25242468E00	.22558651E00
340.	-.513311E-03	-.570662E-01	.35608796E00

Table IV. (Continued)

TEST 15 BLADE 1 r/R = .217

TABLE IVa (CONTINUED)

N	M0	DEL	M1C	DEL	M1S	DEL	M2C	DEL	M2S	DEL	M3C	DEL	M3S	DEL	M4C	DEL	M4S	DEL
1	-2998.	-332.	-.535.	305.	1627.	-413.	1886.	-121.	830.	573.	5127.	830.	-1283.	1167.	639.	196.	539.	253.
2	-1819.	147.	-3018.	-13.	2988.	208.	2172.	-322.	-2082.	-76.	1795.	-620.	-2871.	-1053.	216.	-15.	143.	-280.
3	-1202.	-121.	-3305.	18.	3394.	-450.	3283.	488.	-4980.	-305.	652.	427.	-1708.	-779.	139.	162.	627.	37.
4	-2704.	41.	-1790.	300.	1472.	-82.	2389.	-344.	569.	543.	4774.	699.	-2961.	-168.	433.	15.	250.	-95.
5	-3330.	508.	-798.	-325.	751.	630.	2476.	116.	3074.	-258.	8607.	-935.	-6829.	-939.	879.	-52.	-74.	-151.
6	-6272.	-194.	8682.	106.	-3326.	-396.	2330.	159.	9585.	-118.	12070.	169.	-8999.	-835.	1468.	139.	-342.	-7.
7	-3297.	-166.	-1017.	317.	961.	-180.	1992.	-231.	2151.	728.	6256.	1037.	-2226.	828.	329.	-224.	199.	-6.
8	-4256.	-104.	-3487.	-13.	-819.	40.	5425.	405.	2552.	225.	5652.	15.	-5078.	27.	549.	-77.	109.	29.
9	-5467.	-30.	-1099.	-91.	-3413.	-72.	7376.	-242.	4257.	-172.	6757.	-209.	-6824.	606.	827.	32.	-56.	63.
10	-1622.	674.	-3601.	-675.	3588.	1056.	1407.	193.	-1761.	-1497.	1768.	-2195.	-1906.	-144.	144.	-258.	353.	14.
11	-1332.	-363.	-518.	63.	4471.	-426.	-1061.	-99.	-2231.	358.	2600.	275.	1371.	881.	202.	82.	625.	82.
SIGMA		314.		282.		462.		276.		586.		849.		752.		140.		128.

TABLE IVb (CONTINUED)

M0	M1C	M1S	M2C	M2S	M3C	M3S	M4C	M4S
.9077518E-02	-.6215 56E-01	.4079191E-01	.3444867E-01	-.9212908E-01	-.4563645E-01	.7041207E-02	-.5590955E-02	.7852821E-02
-.2754096E00	.8388692E00	-.1559526E00	-.9456459E00	.1375116QE01	.1215090GE01	.1914820E-01	.1358146GE00	-.6739666E-01
.7063486[00	-.4755301E00	.1194771ZE01	-.9052341E00	-.1397574E01	-.1029356E01	.1111394E01	-.1742723E00	.1127743[E00

TABLE IVc (CONTINUED)

PSI	M0	dM/dT1C	dM/dT1S
0.	-.6982G8E-01	.9687266[E00	-.1328042E01
20.	-.7428000E-01	.1105187[E01	-.5863605E00
40.	-.5362[1E-01	.7101407[E00	.1200043[E01
60.	-.3424[5E-01	.4480474[E00	.1739037[E01
80.	-.7045[5E-02	.6040348GE00	.1557530[E01
100.	.3710908E-01	.5005084[E00	.1704302[E01
120.	.1007820[E00	-.4501533E00	.2772214[E01
140.	.1720124[E00	-.2022341E01	.3583784[E01
160.	.1910860[E00	-.3231546E01	.3111262[E01
180.	.1456972[E00	-.3139208E01	.1181726[E01
200.	.4030009E-01	-.1512582E01	-.1205565E01
220.	-.818404E-01	.8177113[E00	-.2552716E01
240.	-.1496328E00	.2309469[E01	-.1913190E01
260.	-.1183226E00	.1857737[E01	.2650774[E00
280.	-.211469E-01	-.932926E-01	.2230258[E01
300.	.5268795E-01	-.1780340E01	.2285988[E01
320.	.4470105E-01	-.1774493E01	.4236247[E00
340.	-.191226E-01	-.3559886E00	-.1554059E01

Table IV. (Continued)

TEST 15 BLADE 2 r/R = .247

TABLE IVa (CONTINUED)

N	M0	DEL	M1C	DEL	M1S	DEL	M2C	DEL	M2S	DEL	M3C	DEL	M3S	DEL	M4C	DEL	M4S	DEL
1	-3238.	-420.	-1301.	189.	534.	-513.	2172.	361.	678.	385.	4516.	530.	-1633.	810.	506.	-2.	537.	254.
2	-2127.	43.	-2629.	-24.	2353.	350.	1688.	-293.	-1894.	-11.	1218.	-415.	-2554.	-509.	50.	-159.	306.	-138.
3	-1520.	-187.	-3654.	205.	2637.	-629.	1821.	-106.	-4307.	113.	513.	106.	-1808.	-1032.	226.	216.	309.	-334.
4	-3168.	-240.	-1506.	164.	428.	-384.	2500.	130.	258.	265.	6432.	736.	-3264.	-460.	454.	78.	587.	71.
5	-3705.	261.	-776.	-573.	-138.	618.	2253.	-274.	2089.	-152.	6212.	1.	-6047.	-948.	708.	73.	-303.	-332.
6	-6291.	-188.	2054.	283.	-4500.	-475.	3186.	-5.	9220.	70.	10870.	-94.	-7222.	-562.	1918.	86.	-580.	-118.
7	-3498.	-222.	-671.	349.	-68.	-380.	2145.	-15.	9239.	873.	6077.	1258.	-9346.	739.	393.	-94.	164.	-20.
8	-4051.	269.	-1371.	-129.	-1182.	359.	5397.	508.	1086.	-832.	4365.	-691.	-6783.	405.	438.	-119.	215.	293.
9	-5736.	-63.	-833.	54.	-3995.	-56.	7494.	-88.	6072.	453.	6822.	207.	-7192.	509.	766.	56.	-172.	75.
10	-1491.	940.	-7306.	-760.	3137.	1422.	334.	-669.	-1924.	-1810.	1004.	-2118.	-1260.	462.	96.	-261.	528.	175.
11	-1256.	-194.	-854.	249.	3718.	-305.	-876.	449.	-1430.	637.	2815.	482.	1287.	875.	300.	119.	773.	159.
SIGMA		359.		343.		598.		335.		714.		844.		884.		134.		197.

TABLE IVb (CONTINUED)

M0	M1C	M1S	M2C	M2S	M3C	M3S	M4C	M4S
.5906177E-02	-.5734425E-01	.4815099E-01	.1988060E-01	-.8811535E-01	-.4258355E-01	.1075563E-01	-.4387519E-02	.8842252E-02
-.2234634E00	.8221691E00	-.2594777E00	-.7117878E00	.1390091E01	.1165279ZE01	-.2100946E-01	.1096815E00	-.1406027E-01
.7172604E00	-.4193808E00	.1187933E01	-.1022606E01	-.1216695E01	-.8966755E00	.1165583E01	-.1068216E00	.1624480E00

TABLE IVc (CONTINUED)

PSI	M0	dM/dT1C	dM/dT1S
0.	-.7855946E-01	.1161656E01	-.1728124E01
20.	-.7700025E-01	.1319148E01	-.1560522E00
40.	-.5268855E-01	.7558772E00	.1388141E01
60.	-.3022125E-01	.3662247E00	.1820737E01
80.	-.2516655E-02	.3750940E00	.1627257E01
100.	.4667101E-01	.2087563E00	.1891592E01
120.	.1099314SE00	-.6008111E00	.2800772SE01
140.	.1601505E00	-.2025731E01	.3432822SE01
160.	.1692933IE00	-.3032458E01	.2812598SE01
180.	.1213750TE00	-.2813196E01	.9037087SE00
200.	.2180847E-01	-.1177578E01	-.1297235E01
220.	-.8785056E-01	.1031521TE01	-.2406991E01
240.	-.1614039E00	.2324602IE01	-.1610804E01
260.	-.1014150E00	.1729526GE01	.5500783IE00
280.	-.7117156E-02	-.1963123E00	.2316535ZF01
300.	.5831616E-01	-.1719794E01	.2117281ZE01
320.	.3831991E-01	-.1561440E01	.1462908OE00
340.	-.3266916E-01	-.1081654E00	-.1698315E01

Table IV. (Continued)

TEST 15 BLADE 3 r/h = .217

TABLE IVa (CONTINUED)

N	M0	DEL	M1C	DEL	M1S	DEL	M2C	DEL	M2S	DEL	M3C	DEL	M3S	DEL	M4C	DEL	M4S	DEL
1	-3115.	-333.	-551.	417.	181.	-524.	1253.	-118.	2241.	643.	4028.	265.	-879.	612.	397.	-5.	601.	119.
2	-2010.	80.	-3094.	12.	1833.	223.	1738.	29.	-387.	124.	2784.	-229.	-1092.	-685.	211.	13.	308.	-137.
3	-1603.	-394.	-3161.	223.	2277.	-543.	1775.	-101.	-2267.	722.	1565.	480.	-1603.	-675.	207.	250.	194.	-223.
4	-2960.	-87.	-1222.	24.	283.	-205.	1922.	-56.	1352.	-4.	5025.	556.	-2035.	-167.	380.	-3.	582.	144.
5	-3577.	387.	-185.	-524.	-583.	471.	1617.	-155.	3861.	-500.	6954.	82.	-2733.	-656.	701.	109.	318.	-154.
6	-6493.	-299.	1509.	244.	-4585.	-167.	1936.	115.	10834.	504.	11587.	108.	-5856.	-646.	1385.	125.	436.	-71.
7	-3578.	-327.	-70.	412.	-556.	-549.	944.	-649.	3580.	909.	6509.	1099.	-929.	999.	606.	-103.	271.	-202.
8	-3870.	368.	-1118.	-370.	-1232.	693.	4201.	216.	1901.	-1513.	5359.	-704.	-3119.	511.	343.	-259.	666.	353.
9	-5659.	-53.	5313.	23.	-4568.	-215.	6516.	270.	5708.	618.	7336.	-105.	-5289.	250.	867.	78.	129.	-40.
10	-1733.	675.	-1471.	-453.	2547.	1203.	432.	-253.	182.	-956.	2985.	-1326.	-1622.	-680.	173.	-178.	542.	16.
11	-1076.	-15.	-1618.	-58.	3521.	-187.	-526.	702.	-1204.	-256.	2466.	-234.	1602.	835.	110.	-13.	839.	195.
SIGMA		333.		314.		550.		325.		728.		619.		606.		136.		175.

TABLE IVb (CONTINUED)

M0	M1C	M1S	M2C	M2S	M3C	M3S	M4C	M4S
.2009202E-02	-.5839168E-01	.8446112E-01	.2356001E-01	-.755275E-01	-.3328295E-01	-.4701565E-02	-.5425266E-02	.2167652E-02
-.2661901E00	.8437865E00	-.2117632E00	-.7533782E00	.1300265QE01	.1022562GE01	.2889420BE00	.1211187GE00	.6031052E-01
.7141891BE00	-.4198836E00	.1137045BE01	-.8103882E00	-.1266025E01	-.9809674E00	.7888288GE00	-.1393978E00	.4774080E-01

TABLE IVc (CONTINUED)

PSI	M0	dM/dT1C	dM/dT1S
0.	-.6157045E-01	.9678415BE00	-.1627468E01
20.	-.7829B2E-01	.1554840ZE01	-.4013231E00
40.	-.5764056-01	.1039475GE01	.1080535BE01
60.	-.2465836-01	.3390707BE00	.1845864BE01
80.	.8517911E-02	.1169375GE00	.1815559BE01
100.	.4857521E-01	.3457649E-01	.1907802ZE01
120.	.9773885E-01	-.6065872E00	.2579323BE01
140.	.1396865GE00	-.1832905E01	.3203735SE01
160.	.1500343ZE00	-.2843788E01	.2811706RE01
180.	.1137782BE00	-.2764737E01	.1174253E01
200.	.3562127E-01	-.1409917E01	-.9001114E00
220.	-.5532016-01	.5411493SE00	-.2184961E01
240.	-.1121096E00	.1907863IE01	-.1752210E01
260.	-.9962016-01	.1764031SE01	.8683452E-02
280.	-.3077686-01	.2225913ZE00	.1771213SE01
300.	.3463640E-01	-.1441201E01	.2065335E01
320.	.1907806-01	-.1791028E01	.6491335SE00
340.	-.7056836-02	-.5911459E00	-.1136662E01

Table IV. (Continued)

TEST 15 BLADE 4 r/R = .596

TABLE IVa (CONTINUED)

N	M0	DEL	M1C	DEL	M1S	DEL	M2C	DEL	M2S	DEL	M3C	DEL	M3S	DEL	M4C	DEL	M4S	DEL
1	-1097.	14.	56.	51.	-634.	-142.	819.	107.	443.	128.	1524.	204.	-699.	306.	80.	3.	302.	82.
2	-911.	44.	-266.	7.	-186.	59.	732.	-29.	-323.	-7.	522.	-338.	-948.	-201.	-50.	-59.	199.	-44.
3	-834.	-77.	-560.	41.	-16.	-99.	680.	-65.	-990.	60.	-45.	53.	-698.	-371.	10.	86.	179.	-93.
4	-1159.	-27.	-47.	23.	-637.	-82.	929.	26.	316.	92.	1421.	223.	-1230.	-193.	111.	68.	209.	-7.
5	-1325.	53.	180.	-133.	-767.	194.	747.	-170.	1016.	-119.	2179.	34.	-1975.	-305.	119.	-68.	71.	-109.
6	-1932.	-50.	1074.	60.	-1925.	-112.	1128.	21.	2931.	62.	3867.	-37.	-2775.	-195.	494.	68.	75.	-59.
7	-1262.	-45.	210.	74.	-712.	-31.	820.	6.	875.	251.	2107.	483.	-968.	206.	29.	-67.	217.	13.
8	-1408.	38.	-17.	-44.	-1103.	68.	1804.	185.	522.	-263.	1455.	-198.	-1704.	150.	86.	-19.	282.	116.
9	-1780.	-20.	92.	11.	-1839.	-58.	2376.	-37.	1367.	128.	2066.	39.	-2720.	172.	168.	31.	114.	-1.
10	-904.	120.	-133.	-134.	-32.	285.	310.	-163.	-330.	-533.	308.	-861.	-615.	245.	-39.	-108.	330.	5.
11	-766.	-51.	-80.	25.	187.	-101.	-88.	126.	-165.	182.	940.	179.	491.	207.	111.	84.	351.	67.
SIGMA		56.		71.		131.		107.		214.		320.		245.		66.		66.

TABLE IVb (CONTINUED)

M0	M1C	M1S	M2C	M2S	M3C	M3S	M4C	M4S
-.1885625E-02	-.1141756E-01	.6695304E-02	.7199525E-02	-.2381046E-01	-.1733065E-01	.6812625E-02	-.2203505E-02	.2600621E-02
-.5812775E-01	.2117803960E00	-.6631025E-01	-.2007053E00	.4074665E00	.4520828780E00	-.2456869E-01	.4704505E-01	-.7314735E-02
.1632481250E00	-.9053515E-01	.3108010650E00	-.3016232E00	-.3453867E00	-.3133130E00	.6413277350E00	-.2981615E-01	.2569529E-01

TABLE IVc (CONTINUED)

PSI	M0	dM/dT1C	dM/dT1S
0.	-.2560775E-01	.4430044600E00	-.5730272E00
20.	-.2240045E-01	.4254557900E00	-.2291875E-01
40.	-.1270935E-01	.1328725450E00	.4768172250E00
60.	-.9791685E-02	-.2033565E-01	.5448042250E00
80.	-.1102475E-01	.8686111E-01	.3540092050E00
100.	-.4801735E-02	.1772577950E00	.3414337350E00
120.	.1262103E-01	-.4633065E-01	.6514534050E00
140.	.3252271E-01	-.5370103E00	.9649187550E00
160.	.4186981E-01	-.9340066E00	.8539493050E00
180.	.3191850E-01	-.8846616E00	.2356489050E00
200.	.3472503E-02	-.3373613E00	-.5166765C00
220.	-.2955035E-01	.3870472650E00	-.8617635E00
240.	-.4475205E-01	.7851999850E00	-.5206208E00
260.	-.2930155E-01	.5514685150E00	.2243702E00
280.	.3772155E-02	-.1151999E00	.7755493150E00
300.	.2438812E-01	-.6256339E00	.6492501350E00
320.	.1547762E-01	-.5581602E00	-.2462105E-01
340.	-.9894325E-02	.3262564E-02	-.6066976E00

Table IV. (Continued)

TEST 1b BLADE 1 r/R = .217

TABLE IVa (CONTINUED)

N	M0	DEL	M1C	DEL	M1S	DEL	M2C	DEL	M2S	DEL	M3C	DEL	M3S	DEL	M4C	DEL	M4S	DEL
1	-1229.	377.	-1477.	-132.	1081.	-149.	1450.	-109.	1404.	43.	68.	-27.	-1214.	89.	1351.	-728.	-1438.	-352.
2	498.	778.	-2829.	-285.	3467.	523.	488.	59.	-682.	-277.	1226.	122.	-100.	475.	1228.	19.	-2104.	-792.
3	586.	102.	-3325.	-217.	4246.	588.	-119.	-99.	-1419.	-187.	1616.	62.	-153.	76.	525.	-305.	-2143.	-618.
4	777.	-253.	-3760.	129.	4079.	-511.	-765.	-167.	-2312.	75.	1870.	-109.	67.	-230.	692.	365.	-1618.	131.
5	-628.	166.	-2038.	101.	2380.	117.	991.	93.	269.	70.	883.	147.	-670.	141.	1283.	-252.	-186.	1107.
6	-2558.	-233.	-784.	-81.	180.	-118.	1987.	-188.	2226.	-86.	-628.	-178.	-1660.	20.	2065.	398.	-1291.	-958.
7	-1196.	-480.	-1966.	203.	2098.	-277.	1056.	265.	309.	269.	824.	45.	-833.	-28.	1223.	-269.	-1021.	267.
8	-2493.	-595.	-2050.	83.	76.	-391.	2634.	214.	525.	298.	245.	-90.	-765.	-233.	2335.	263.	-987.	628.
9	-2921.	300.	-1862.	14.	-1086.	372.	3882.	-96.	608.	-176.	-995.	53.	-668.	-9.	2776.	68.	-2080.	-266.
10	-929.	-341.	-1219.	206.	2220.	-583.	318.	72.	1381.	208.	486.	-67.	-1737.	-250.	2039.	665.	-607.	237.
11	104.	137.	-1048.	-21.	4222.	428.	-728.	-24.	1534.	-168.	648.	52.	-2023.	-51.	1430.	10.	-458.	12.
SIGMA		389.		157.		407.		141.		176.		106.		198.		346.		531.

TABLE IVb (CONTINUED)

M0	M1C	M1S	M2C	M2S	M3C	M3S	M4C	M4S
.5174158E-01	-.1617526E00	.14517316E00	-.183319E-01	-.1441077E00	.9074420E-01	.5039004E-01	-.1604356E-01	-.7155111E-01
-.3227088E00	.1488092GE01	-.540723E-01	-.3586604E00	.20912464E01	-.7235817E00	-.1222335E01	.46043811E00	.72683631E00
.1895058E01	-.6375548E00	.2779965E01	-.218535RE01	-.1034088E01	.10132877E01	.8917655E-01	-.1018603E01	.17982569E00

TABLE IVc (CONTINUED)

PSI	M0	dM/dT1C	dM/dT1S
0.	-.5164235E-01	.54357081E00	-.9322701E00
20.	-.1411603E00	.1502008?E01	.49295827E00
40.	-.1369027E00	.1898816?E01	.2385R800E01
60.	-.4088355E-01	.2228816?E01	.3522098?E01
80.	.8078284E-01	.2240?025E01	.4743088?E01
100.	.2342943?E00	.5041176?E00	.6916334?E01
120.	.6281?033E00	-.3069667?E01	.8288787?E01
140.	.5343R157E00	-.5720794E01	.6289705?E01
160.	.3982?152E00	-.4691152E01	.1653091?E01
180.	.9037603E-01	-.9854?20E00	-.2683736?01
200.	-.1145004E00	.1583?352E01	-.1378172E01
220.	-.7230?2E-01	.1082?0?0E01	.6476?043E00
240.	.5099026E-01	-.6127?38E00	.1371220?E01
260.	.2906594E-01	-.1010633E01	.6568?981E00
280.	-.1112832E00	-.2661362E00	.3606596?E00
300.	-.1665790E00	-.?0755?E-01	.8096489?E00
320.	-.780912E-01	-.5306621E00	.5713805E00
340.	-.156221E-02	-.4638999E00	-.5878852E00

Table IV. (Continued)

TEST 15 BLADE 2 r/R = .217

TABLE IVa (CONTINUED)

N	M0	DEL	M1C	DEL	M1S	DEL	M2C	DEL	M2S	DEL	M3C	DEL	M3S	DEL	M4C	DEL	M4S	DEL
1	-2120.	-34.	-1188.	-245.	437.	248.	1706.	-259.	1715.	-46.	-522.	-96.	-1208.	-34.	1745.	-770.	-1685.	-475.
2	-887.	-128.	-2010.	36.	1989.	133.	880.	194.	311.	189.	472.	-141.	-591.	159.	2135.	483.	-1215.	-224.
3	12.	205.	-2443.	126.	2819.	259.	-111.	-267.	-571.	82.	1014.	-94.	-778.	-289.	1105.	-178.	-590.	317.
4	577.	12.	-3461.	-159.	3621.	125.	-760.	-218.	-2027.	-289.	1870.	84.	-135.	44.	874.	86.	-1182.	-382.
5	-1224.	45.	-1596.	80.	894.	-314.	1438.	245.	860.	185.	84.	-133.	-862.	2.	1861.	-122.	-737.	347.
6	-2502.	304.	-313.	37.	-446.	269.	2151.	-509.	2495.	-148.	-969.	111.	-1552.	-135.	3339.	356.	-1145.	184.
7	-1089.	106.	-1694.	8.	1139.	-168.	1244.	133.	677.	42.	575.	312.	-707.	152.	1636.	-299.	-902.	164.
8	-2535.	-106.	-1618.	105.	-786.	-516.	2727.	208.	756.	109.	-100.	105.	-827.	66.	2600.	-63.	-715.	705.
9	-3608.	-54.	-1575.	-61.	-1686.	237.	4103.	162.	874.	-121.	-963.	-332.	-606.	44.	3594.	154.	-2317.	-560.
10	-1303.	-172.	-809.	162.	1046.	-458.	885.	38.	1848.	164.	-66.	3.	-3436.	-150.	2341.	436.	-573.	249.
11	-733.	-69.	-648.	-90.	2418.	179.	352.	273.	2094.	-167.	-140.	-79.	-1428.	160.	1524.	-80.	-1028.	-326.
SIGMA		140.		120.		289.		253.		156.		134.		133.		346.		391.

TABLE IVb (CONTINUED)

M0	M1C	M1S	M2C	M2S	M3C	M3S	M4C	M4S
.4168258E-01	-.1429530E00	.1235512E00	-.303672E-01	-.1247404E00	.8557752E-01	.2196869E-01	.3813332E-02	-.227611E-01
-.4135190E00	.1433259E01	-.3502165E00	.5784741E-01	.2080038901	-.872065E00	-.7649001E00	.2871765IE00	.1177508E00
.1816172E01	-.5318420E00	.2427952E01	-.2057150E01	-.8351669E00	.1029710701	.6055176E-01	-.1165205E01	.4657594E00

TABLE IVc (CONTINUED)

PSI	M0	dM/dT1C	dM/dT1S
0.	-.4224776-01	.4026082IE00	-.9083049E00
20.	-.1137818E00	.12601094E01	.8577509AE00
40.	-.1516695E00	.2057875901	.2581529701
60.	-.834271E-01	.2303559001	.3107742301
80.	.8012689E-01	.1384448501	.4003047201
100.	.2718181700	-.1256833E01	.6387530201
120.	.4073152400	-.4182607E01	.7952294101
140.	.4141861300	-.5187485E01	.5752458001
160.	.2744998600	-.3467445E01	.9838760300
180.	.7250501E-01	-.0296805E00	-.1704060E01
200.	-.5324781-01	.1007187701	-.9381228E00
220.	-.4393861-01	.7728749501	.1199884301
240.	.1671273E-01	-.1668457E00	.1493686601
260.	.1008598E-01	-.6087746E00	.5402195001
280.	-.690725E-01	-.5103982E00	.4958496401
300.	-.1207628E00	-.3882322E00	.1155675801
320.	-.872740E-01	-.3365944E00	.6816948801
340.	-.3114191-01	-.7719801-01	-.7516363E00

Table IV. (Continued)

TEST 16 BLADE 3 r/R = .217

TABLE IVa (CONTINUED)

N	M0	DEL	M1C	DEL	M1S	DEL	M2C	DEL	M2S	DEL	M3C	DEL	M3S	DEL	M4C	DEL	M4S	DEL
1	-1265.	604.	-1172.	3.	449.	132.	1665.	-236.	1507.	-216.	-327.	14.	-1089.	77.	1586.	-860.	-1758.	-575.
2	-11.	458.	-2170.	-715.	1782.	42.	912.	178.	140.	117.	416.	-265.	-430.	206.	1868.	226.	-1602.	-226.
3	45.	4.	-2067.	-1272.	2670.	348.	-166.	-429.	-1081.	-302.	1330.	170.	-490.	-117.	1238.	-118.	-1612.	-137.
4	773.	50.	-329.	1467.	3276.	164.	-389.	-62.	-2049.	-147.	1701.	10.	5.	-0.	1205.	204.	-1724.	-106.
5	-947.	-55.	-1573.	-204.	943.	-234.	1467.	256.	852.	234.	395.	41.	-645.	165.	1661.	-201.	-1177.	142.
6	-2271.	48.	-561.	464.	48.	504.	2079.	-457.	2241.	-397.	-512.	381.	-1567.	-103.	2089.	306.	-1075.	4.
7	-1245.	-382.	-1594.	-226.	990.	-278.	1249.	123.	718.	103.	508.	155.	-1020.	-227.	1786.	-43.	-1374.	244.
8	-2320.	-399.	-1603.	-91.	-618.	-362.	2623.	-29.	749.	159.	84.	168.	-677.	-56.	1924.	-445.	-791.	675.
9	-2897.	142.	-1375.	196.	-1708.	95.	4436.	288.	1024.	55.	*****	-366.	-514.	69.	3397.	453.	-1881.	-333.
10	-1134.	-347.	-851.	224.	975.	-599.	753.	100.	1989.	363.	-103.	-148.	-1499.	-107.	2071.	278.	-543.	531.
11	-248.	78.	-705.	151.	2535.	184.	37.	250.	2176.	-30.	-174.	-221.	-1568.	96.	1670.	110.	-1099.	-219.
SIGMA		275.		654.		314.		256.		228.		215.		128.		374.		355.

TABLE IVb (CONTINUED)

M0	M1C	M1S	M2C	M2S	M3C	M3S	M4C	M4S
.4270140E-01	-.6673076-01	.1033945E00	-.1595016-01	-.1313841E00	.9271002E-01	.9156096E-01	.1503291E-01	-.5795965E-01
-.3460557E00	.5165028E00	-.1111522E00	-.2176453E00	.2132568E01	-.8153320E00	-.8018200E00	.1880371E00	.4122812E00
.1665300E01	.1812957E-02	.2245224E01	-.2119194E01	-.8883704E00	.9529716E00	.8900691E-01	-.8579885E00	.5192002E-01

TABLE IVc (CONTINUED)

PSI	M0	dM/dT1C	dM/dT1S
0.	.5776355E-01	-.6746035E00	-.3570985E00
20.	-.6708576-01	.5632647E00	.6962632E00
40.	-.1220786E00	.1838430E01	.2291749E01
60.	-.4696066E-01	.2134536E01	.3332104E01
80.	.8306588E-01	.1626902E01	.4320276E01
100.	.2043118E00	-.3965541E00	.5947046E01
120.	.3123652E00	-.3092259E01	.6864866E01
140.	.3612916E00	-.4450588E01	.4056176E01
160.	.2586701E00	-.3145723E01	.7796811E00
180.	.2580485E-01	-.7683386-01	-.2266667E01
200.	-.1497899E00	.2028601E01	-.1950238E01
220.	-.1247335E00	.1719342E01	.2011204E00
240.	.6105486E-02	.1798736E00	.1347048E01
260.	.3998483E-01	-.5935617E00	.1006163E01
280.	-.5054036-01	-.4275937E00	.7262406E00
300.	-.9887026-01	-.6525693E00	.1071549E01
320.	-.1125806-01	-.1156354E01	.9651594E00
340.	.9056972E-01	-.1369636E01	.4594504E-01

Table IV. (Concluded)

TEST 16 BLADE 2 r/R = .596

TABLE IVa (CONTINUED)

N	M0	DEL	M1C	DEL	M1S	DEL	M2C	DEL	M2S	DEL	M3C	DEL	M3S	DEL	M4C	DEL	M4S	DEL
1	-719.	53.	-15	-63.	-545.	74.	538.	-94.	516.	-68.	-962.	5.	-199.	16.	547.	-910.	-879.	-145.
2	-331.	91.	-164.	59.	-60.	73.	371.	96.	216.	75.	-16.	-68.	-59.	78.	652.	151.	-368.	-89.
3	-272.	-2.	-346.	7.	185.	112.	4.	-122.	-54.	14.	178.	-18.	-172.	-76.	328.	-48.	-140.	116.
4	-18.	49.	-585.	-49.	356.	8.	-114.	-44.	-434.	-74.	411.	18.	-30.	-4.	205.	23.	-395.	-147.
5	-671.	-116.	-132.	1.	-388.	-67.	473.	57.	348.	57.	-105.	-42.	-117.	42.	601.	-48.	-151.	150.
6	-959.	23.	172.	-2.	-735.	97.	669.	-157.	802.	-20.	-440.	-0.	-332.	-75.	1144.	105.	-295.	54.
7	-626.	-90.	-119.	20.	-384.	-91.	413.	20.	273.	-7.	32.	82.	-173.	-13.	563.	-68.	-226.	70.
8	-897.	-89.	-149.	26.	-883.	-154.	830.	53.	304.	22.	-129.	79.	-115.	-32.	872.	-22.	-153.	265.
9	-1030.	74.	-165.	-16.	-1137.	52.	1236.	70.	360.	-14.	-412.	-41.	17.	50.	1267.	88.	-744.	-216.
10	-585.	-41.	108.	42.	-386.	-131.	347.	31.	606.	42.	-151.	-7.	-313.	-40.	762.	126.	-175.	52.
11	-392.	48.	167.	-26.	-35.	27.	212.	91.	693.	-28.	-140.	1.	-313.	54.	550.	23.	-249.	-109.
SIGMA		69.		35.		90.		85.		45.		43.		50.		120.		143.

TABLE IVb (CONTINUED)

M0	M1C	M1S	M2C	M2S	M3C	M3S	M4C	M4S
.6081842E-02	-.2861395E-01	.1854308E-01	-.656926E-02	-.3074116E-01	.2138737E-01	.5264961E-02	-.2580635E-02	-.8514235E-02
-.1428873E00	.3866192E00	-.1314100E00	.2708750E-01	.5625910E00	-.2516956E00	-.1876382E00	.1347410E00	.7005787E-01
.4492587E00	-.9929930E-01	.6825180E00	-.5646760E00	-.2239118E00	.3009110E00	-.9944635E-01	-.4328884E00	.1453224E00

TABLE IVc (CONTINUED)

PSI	M0	dM/dT1C	dM/dT1S
0.	-.1029466E-01	.1538644E00	-.3460939E00
20.	-.3283664E-01	.3397559E00	.1971266E00
40.	-.4195448E-01	.4913321E00	.7652083E00
60.	-.2822785E-01	.5261512E00	.8687918E00
80.	.3276176E-02	.3925436E00	.1016887E01
100.	.4468353E-01	-.3666225E00	.1692272E01
120.	.8165893E-01	-.1201365E01	.2209465E01
140.	.8064427E-01	-.1614867E01	.1559866E01
160.	.5584254E-01	-.9831235E00	.8486332E-01
180.	.4158505E-02	-.1150824E00	-.7499174E00
200.	-.2225066E-01	.3107335E00	-.3157007E00
220.	-.9685644E-02	.1412386E00	.4091494E00
240.	.1104329E-01	-.1362488E00	.3877573E00
260.	.7197460E-02	-.1495918E00	-.6033609E-01
280.	-.1404496E-01	-.4682546E-01	-.5574655E-01
300.	-.2184736E-01	.8574386E-01	.3261686E00
320.	-.8539846E-02	.1768988E00	.2977169ZE00
340.	.1649964E-02	-.9332336E-01	-.1997941E00

Table V. 7.5-Foot 4-Blade Rotor Reduced Experimental Nondimensional Hub Moment Data

ID	CFG	P	MU	THO	THS	THC	AL	CM	CL	CM4PC	CM4PS	CL4PC	CL4PS
896	1	1.56	0.24	0.0	-0.0110	0.0166	0.0	0.0046	-0.0061	-0.0003	-0.0001	-0.0000	0.0002
897	1	1.56	0.24	0.0173	-0.0104	0.0166	0.0	0.0078	-0.0019	-0.0000	-0.0001	-0.0001	0.0006
898	1	1.56	0.24	0.0342	-0.0105	0.0166	0.0	0.0104	0.0010	0.0001	-0.0001	-0.0002	0.0006
900	1	1.56	0.24	0.0515	-0.0112	0.0171	0.0	0.0131	0.0045	0.0005	-0.0004	-0.0005	0.0000
901	1	1.56	0.24	0.0686	-0.0106	0.0163	0.0	0.0170	0.0093	0.0007	-0.0007	-0.0006	-0.0006
902	1	1.56	0.24	0.0853	-0.0112	0.0169	0.0	0.0209	0.0142	0.0009	-0.0009	-0.0007	-0.0007
904	1	1.56	0.26	0.0164	-0.0283	0.0184	0.0	0.0044	-0.0069	-0.0002	0.0002	0.0001	0.0007
905	1	1.56	0.24	0.0166	-0.0077	0.0162	0.0	0.0070	-0.0013	0.0001	-0.0001	-0.0003	0.0007
906	1	1.56	0.24	0.0166	-0.0106	0.0190	0.0	0.0115	0.0032	0.0000	-0.0001	-0.0003	0.0005
907	1	1.56	0.24	0.0166	-0.0287	0.0190	0.0	0.0128	0.0062	-0.0000	-0.0007	-0.0007	0.0004
908	1	1.56	0.24	0.0164	-0.0475	0.0190	0.0	0.0162	0.0123	0.0002	-0.0009	-0.0009	0.0003
909	1	1.56	0.24	0.0164	-0.0271	0.0190	0.0	0.0045	-0.0061	0.0001	0.0005	0.0003	0.0003
900	1	1.56	0.26	0.0164	-0.0454	0.0184	0.0	-0.0019	-0.0172	-0.0003	0.0003	0.0003	0.0010
901	1	1.56	0.24	0.0166	-0.0250	0.0192	0.0	-0.0035	-0.0216	-0.0006	0.0009	0.0005	0.0011
902	1	1.56	0.26	0.0162	-0.0291	0.0190	0.0	0.0040	-0.0071	-0.0002	0.0002	0.0003	0.0008
903	1	1.56	0.26	0.0166	-0.0291	0.0375	0.0	-0.0009	-0.0052	-0.0003	0.0006	0.0005	0.0007
904	1	1.56	0.24	0.0164	-0.0291	0.0555	0.0	-0.0060	-0.0042	-0.0004	0.0003	0.0004	0.0007
905	1	1.56	0.24	0.0166	-0.0291	0.0731	0.0	-0.0106	-0.0029	-0.0006	0.0004	0.0005	0.0008
906	1	1.56	0.24	0.0166	-0.0291	0.0939	0.0	-0.0132	-0.0019	-0.0004	0.0005	0.0007	0.0008
907	1	1.56	0.26	0.0162	-0.0291	0.0169	0.0	0.0048	-0.0067	-0.0001	0.0003	0.0001	0.0007
908	1	1.56	0.24	0.0162	-0.0295	-0.0211	0.0	0.0147	-0.0119	-0.0000	-0.0001	-0.0002	0.0009
909	1	1.56	0.24	0.0164	-0.0295	-0.0394	0.0	0.0107	-0.0142	-0.0000	0.0001	-0.0003	0.0007
910	1	1.56	0.26	0.0164	-0.0293	-0.0593	0.0	0.0231	-0.0142	0.0002	-0.0003	-0.0004	0.0007
912	1	1.56	0.58	-0.0002	-0.0124	0.0213	0.0	0.0043	-0.0065	-0.0005	0.0006	0.0005	0.0011
913	1	1.56	0.58	0.0171	-0.0124	0.0213	0.0	0.0084	-0.0012	-0.0005	-0.0002	0.0002	0.0009
914	1	1.56	0.58	0.0342	-0.0126	0.0213	0.0	0.0131	0.0057	-0.0003	-0.0004	-0.0003	0.0004
915	1	1.56	0.58	0.0515	-0.0124	0.0213	0.0	0.0168	0.0109	-0.0000	-0.0010	-0.0004	0.0002
916	1	1.56	0.58	0.0680	-0.0124	0.0213	0.0	0.0200	0.0147	-0.0001	-0.0010	-0.0007	-0.0000
917	1	1.56	0.58	0.0169	-0.0309	0.0211	0.0	0.0041	-0.0049	-0.0004	0.0001	0.0001	0.0009
918	1	1.56	0.58	0.0168	-0.0110	0.0213	0.0	0.0094	0.0010	-0.0005	-0.0001	-0.0001	0.0007
919	1	1.56	0.58	0.0169	0.0080	0.0211	0.0	0.0143	0.0059	-0.0006	-0.0003	-0.0003	0.0002
920	1	1.56	0.58	0.0169	0.0266	0.0213	0.0	0.0173	0.0113	-0.0007	-0.0012	-0.0009	0.0000
921	1	1.56	0.58	0.0168	-0.0305	0.0213	0.0	0.0040	-0.0049	-0.0001	0.0002	0.0002	0.0010
922	1	1.56	0.58	0.0168	-0.0495	0.0213	0.0	-0.0005	-0.0145	-0.0005	0.0006	0.0004	0.0007
923	1	1.56	0.58	0.0168	-0.0691	0.0211	0.0	-0.0039	-0.0189	-0.0003	0.0012	0.0003	0.0007
924	1	1.56	0.58	0.0166	-0.0302	0.0211	0.0	0.0041	-0.0046	-0.0004	0.0002	0.0002	0.0007
925	1	1.56	0.58	0.0168	-0.0302	0.0412	0.0	-0.0023	-0.0061	-0.0003	0.0007	0.0005	0.0009
926	1	1.56	0.58	0.0168	-0.0302	0.0584	0.0	-0.0063	-0.0033	-0.0004	0.0008	0.0010	0.0012
930	1	1.56	0.70	-0.0003	-0.0138	0.0255	0.0	0.0032	-0.0071	-0.0008	0.0007	0.0008	0.0015
940	1	1.56	0.70	0.0166	-0.0140	0.0257	0.0	0.0106	0.0017	-0.0010	0.0004	0.0006	0.0013
941	1	1.56	0.70	0.0340	-0.0140	0.0255	0.0	0.0172	0.0111	-0.0009	-0.0004	-0.0005	0.0010
942	1	1.56	0.70	0.0426	-0.0140	0.0257	0.0	0.0214	0.0158	-0.0004	-0.0009	-0.0006	0.0012
943	1	1.56	0.70	0.0077	-0.0143	0.0257	0.0	0.0078	-0.0019	-0.0010	0.0007	0.0009	0.0012
944	1	1.56	0.70	0.0077	-0.0216	0.0262	0.0	0.0070	-0.0035	-0.0004	0.0006	0.0011	0.0013
945	1	1.56	0.70	0.0079	-0.0038	0.0262	0.0	0.0134	0.0046	-0.0011	-0.0004	-0.0000	0.0015
946	1	1.56	0.70	0.0077	0.0161	0.0262	0.0	0.0196	0.0102	-0.0014	-0.0005	-0.0007	0.0017

Table V. (Continued)

ID	CFG	P	MU	THO	THS	THF	AL	CM	CL	CM4DF	CM4DS	CL4DF	CL4DS
947	1	1.56	0.79	0.0077	-0.0223	0.0264	0.0	0.0053	-0.0052	-0.0009	0.0007	0.0009	0.0014
948	1	1.56	0.79	0.0077	-0.0407	0.0263	0.0	-0.0031	-0.0160	-0.0004	0.0013	0.0015	0.0014
949	1	1.56	0.79	0.0077	-0.0464	0.0262	0.0	-0.0065	-0.0208	-0.0001	0.0019	0.0020	0.0009
950	1	1.56	0.79	0.0077	-0.0220	0.0264	0.0	0.0050	-0.0053	-0.0007	0.0009	0.0011	0.0015
951	1	1.56	0.79	0.0077	-0.0218	0.0438	0.0	-0.0014	-0.0047	-0.0005	0.0014	0.0013	0.0015
952	1	1.56	0.79	0.0077	-0.0218	0.0413	0.0	-0.0078	-0.0036	-0.0005	0.0013	0.0019	0.0013
953	1	1.56	0.79	0.0077	-0.0218	0.0300	0.0	0.0028	-0.0059	-0.0006	0.0008	0.0010	0.0012
954	1	1.56	0.79	0.0077	-0.0220	0.0154	0.0	0.0094	-0.0046	-0.0008	0.0007	0.0005	0.0011
955	1	1.56	0.79	0.0077	-0.0218	-0.0028	0.0	0.0150	-0.0077	-0.0005	0.0002	0.0001	0.0010
956	1	1.56	0.79	0.0075	-0.0220	-0.0204	0.0	0.0190	-0.0125	-0.0002	-0.0010	-0.0004	0.0009
958	1	1.56	0.96	0.0	-0.0155	0.0295	0.0	0.0030	-0.0050	-0.0010	0.0012	0.0014	0.0015
959	1	1.56	0.96	0.0075	-0.0157	0.0295	0.0	0.0075	-0.0017	-0.0008	0.0003	0.0007	0.0018
960	1	1.56	0.96	0.0149	-0.0157	0.0295	0.0	0.0144	0.0043	-0.0004	-0.0005	0.0000	0.0021
961	1	1.56	0.96	0.0251	-0.0157	0.0295	0.0	0.0171	0.0098	-0.0011	0.0000	-0.0003	0.0017
962	1	1.56	0.96	0.0337	-0.0157	0.0295	0.0	0.0224	0.0153	-0.0009	-0.0009	-0.0009	0.0015
963	1	1.56	0.96	0.0084	-0.0243	0.0247	0.0	0.0051	-0.0058	-0.0008	0.0008	0.0010	0.0014
964	1	1.56	0.96	0.0084	-0.0066	0.0247	0.0	0.0150	0.0050	-0.0009	-0.0005	-0.0001	0.0018
965	1	1.56	0.96	0.0086	0.0113	0.0247	0.0	0.0220	0.0137	-0.0014	-0.0015	-0.0012	0.0024
966	1	1.56	0.96	0.0086	-0.0244	0.0247	0.0	0.0053	-0.0057	-0.0007	0.0014	0.0013	0.0011
967	1	1.56	0.96	0.0086	-0.0372	0.0247	0.0	-0.0009	-0.0127	-0.0005	0.0017	0.0015	0.0009
968	1	1.56	0.96	0.0086	-0.0251	0.0293	0.0	0.0046	-0.0057	-0.0008	0.0008	0.0013	0.0013
969	1	1.56	0.96	0.0086	-0.0251	0.0414	0.0	0.0007	-0.0034	-0.0007	0.0016	0.0016	0.0016
970	1	1.56	0.96	0.0086	-0.0250	0.0496	0.0	-0.0032	-0.0035	-0.0008	0.0021	0.0021	0.0013
971	1	1.56	0.96	0.0086	-0.0251	0.0290	0.0	0.0027	-0.0074	-0.0006	0.0008	0.0014	0.0012
972	1	1.56	0.96	0.0086	-0.0251	0.0098	0.0	0.0118	-0.0066	-0.0004	0.0000	0.0005	0.0013
973	1	1.56	0.96	0.0086	-0.0251	-0.0093	0.0	0.0182	-0.0097	-0.0003	-0.0009	-0.0004	0.0011
979	1	1.33	0.29	0.0	-0.0077	0.0150	0.0	0.0024	-0.0037	-0.0004	0.0002	0.0001	-0.0001
980	1	1.33	0.29	0.0173	-0.0079	0.0152	0.0	0.0045	-0.0024	-0.0001	0.0002	-0.0000	-0.0003
981	1	1.33	0.29	0.0347	-0.0079	0.0152	0.0	0.0069	-0.0011	0.0001	0.0002	-0.0000	-0.0004
982	1	1.33	0.29	0.0518	-0.0079	0.0152	0.0	0.0094	0.0001	0.0002	0.0004	0.0000	-0.0006
983	1	1.33	0.29	0.0693	-0.0079	0.0152	0.0	0.0123	0.0019	0.0004	0.0003	-0.0001	-0.0003
984	1	1.33	0.29	0.0771	-0.0079	0.0152	0.0	0.0135	0.0027	0.0005	0.0003	0.0000	-0.0004
985	1	1.33	0.29	0.0169	-0.0185	0.0168	0.0	0.0025	-0.0034	-0.0003	0.0002	0.0001	-0.0002
986	1	1.33	0.29	0.0169	0.0003	0.0166	0.0	0.0063	-0.0012	-0.0000	0.0002	-0.0001	-0.0002
987	1	1.33	0.29	0.0169	0.0187	0.0166	0.0	0.0092	0.0015	0.0001	0.0001	-0.0000	-0.0003
988	1	1.33	0.29	0.0169	0.0377	0.0168	0.0	0.0115	0.0041	0.0003	0.0001	-0.0001	-0.0004
989	1	1.33	0.29	0.0169	0.0546	0.0169	0.0	0.0140	0.0071	0.0005	0.0001	-0.0002	-0.0005
990	1	1.33	0.29	0.0169	-0.0176	0.0168	0.0	0.0024	-0.0033	-0.0002	0.0002	0.0000	-0.0003
991	1	1.33	0.29	0.0169	-0.0384	0.0168	0.0	-0.0012	-0.0070	-0.0003	0.0002	0.0001	-0.0002
992	1	1.33	0.29	0.0169	-0.0578	0.0169	0.0	-0.0039	-0.0098	-0.0006	0.0003	0.0001	-0.0002
993	1	1.33	0.29	0.0169	-0.0775	0.0168	0.0	-0.0060	-0.0133	-0.0007	0.0004	0.0001	-0.0002
1000	1	1.33	0.29	0.0169	-0.0141	0.0168	0.0	0.0029	-0.0032	-0.0002	0.0002	0.0000	-0.0003
1001	1	1.33	0.29	0.0169	-0.0143	0.0349	0.0	-0.0011	-0.0019	-0.0003	0.0000	0.0001	-0.0001
1002	1	1.33	0.29	0.0169	-0.0143	0.0520	0.0	-0.0049	0.0001	-0.0005	0.0001	0.0001	-0.0002
1003	1	1.33	0.29	0.0169	-0.0143	0.0702	0.0	-0.0084	0.0025	-0.0005	-0.0002	0.0002	-0.0000
1004	1	1.33	0.29	0.0169	-0.0140	0.0798	0.0	-0.0103	0.0040	-0.0004	-0.0002	0.0001	-0.0002

Table V. (Continued)

ID	CFG	P	MII	THO	THS	THC	AL	CM	CL	CM4PC	CM4PS	CL4PC	CL4PS
1005	1	1.33	0.20	0.0160	-0.0143	0.0174	0.0	0.0023	-0.3037	-0.0003	0.0002	0.0000	-0.0002
1006	1	1.33	0.20	0.0160	-0.0140	-0.0023	0.0	0.0066	-0.3060	-0.0002	0.0003	0.0002	-0.0003
1007	1	1.33	0.20	0.0160	-0.0143	-0.0214	0.0	0.0106	-0.0090	-0.0004	0.0004	0.0002	-0.0001
1025	1	1.33	0.40	0.0166	-0.0183	0.0586	0.0	-0.0054	0.0010	-0.0007	0.0002	0.0003	-0.0004
1026	1	1.33	0.40	0.0164	-0.0183	0.0744	0.0	-0.0096	0.0033	-0.0007	0.0000	0.0003	-0.0002
1029	1	1.33	0.40	0.0164	-0.0183	0.0045	0.0	0.0057	-0.3059	-0.0005	0.0002	0.0001	-0.0004
1030	1	1.33	0.40	0.0162	-0.0187	-0.0324	0.0	0.0148	-0.3103	-0.0005	0.0005	0.0000	-0.0004
1035	1	1.33	0.54	0.0	-0.0141	0.0244	0.0	0.0016	-0.3038	-0.0004	0.0004	-0.0001	-0.0003
1036	1	1.33	0.54	0.0161	-0.0143	0.0244	0.0	0.0069	-0.3002	-0.0004	0.0003	0.0000	-0.0004
1037	1	1.33	0.54	0.0340	-0.0143	0.0244	0.0	0.0124	0.3041	-0.0003	0.0000	-0.0002	-0.0004
1038	1	1.33	0.54	0.0422	-0.0143	0.0244	0.0	0.0139	0.3055	-0.0004	0.0000	-0.0000	-0.0004
1039	1	1.33	0.54	0.0072	-0.0143	0.0244	0.0	0.0044	-0.3014	-0.0007	0.0002	0.0001	-0.0004
1040	1	1.33	0.54	0.0070	-0.0225	0.0229	0.0	0.0070	-0.3039	-0.0009	0.0005	0.0001	-0.0005
1041	1	1.33	0.54	0.0070	-0.0033	0.0229	0.0	0.0092	0.3010	-0.0004	0.0003	0.0001	-0.0004
1043	1	1.33	0.54	0.0070	0.0241	0.0227	0.0	0.0155	0.3060	-0.0006	-0.0004	-0.0002	-0.0002
1044	1	1.33	0.54	0.0070	-0.0214	0.0229	0.0	0.0017	-0.3042	-0.0005	0.0009	-0.0001	-0.0004
1045	1	1.33	0.54	0.0070	-0.0397	0.0229	0.0	-0.0024	-0.0076	-0.0010	0.0006	0.0003	-0.0006
1046	1	1.33	0.54	0.0070	-0.0560	0.0229	0.0	-0.0074	-0.3119	-0.0011	0.0010	0.0005	-0.0005
1047	1	1.33	0.54	0.0070	-0.0195	0.0234	0.0	0.0021	-0.3036	-0.0004	0.0006	-0.0001	-0.0005
1048	1	1.33	0.54	0.0072	-0.0154	0.0415	0.0	-0.0010	-0.3012	-0.0008	0.0005	0.0002	-0.0004
1049	1	1.33	0.54	0.0072	-0.0194	0.0583	0.0	-0.0056	0.3006	-0.0002	0.0005	0.0004	-0.0003
1050	1	1.33	0.54	0.0070	-0.0194	0.0731	0.0	-0.0087	0.3028	-0.0005	0.0008	0.0007	-0.0004
1051	1	1.33	0.54	0.0070	-0.0197	0.0267	0.0	0.0025	-0.3023	-0.0004	0.0005	-0.0003	-0.0004
1052	1	1.33	0.54	0.0070	-0.0197	0.0084	0.0	0.0059	-0.3052	-0.0005	0.0002	-0.0001	-0.0004
1053	1	1.33	0.54	0.0070	-0.0195	-0.0105	0.0	0.0098	-0.3078	-0.0004	0.0003	-0.0002	-0.0004
1054	1	1.33	0.54	0.0070	-0.0195	-0.0245	0.0	0.0135	-0.3089	-0.0004	0.0003	-0.0002	-0.0004
1060	1	1.33	0.66	0.0	-0.0149	0.0288	0.0	0.0018	-0.3032	-0.0010	0.0007	0.0000	-0.0004
1061	1	1.33	0.66	0.0080	-0.0150	0.0288	0.0	0.0058	-0.3004	-0.0008	0.0005	-0.0000	-0.0007
1062	1	1.33	0.66	0.0166	-0.0150	0.0288	0.0	0.0090	0.3020	-0.0005	0.0004	-0.0002	-0.0004
1063	1	1.33	0.66	0.0253	-0.0150	0.0288	0.0	0.0125	0.3049	-0.0004	-0.0001	-0.0003	-0.0004
1064	1	1.33	0.66	0.0339	-0.0150	0.0288	0.0	0.0164	0.0078	-0.0002	-0.0003	-0.0009	-0.0004
1065	1	1.33	0.66	0.0070	-0.0237	0.0274	0.0	0.0020	-0.3035	-0.0007	0.0007	-0.0001	-0.0007
1066	1	1.33	0.66	0.0070	-0.0058	0.0274	0.0	0.0081	0.3007	-0.0007	0.0001	-0.0003	-0.0005
1067	1	1.33	0.66	0.0070	0.0059	0.0274	0.0	0.0146	0.3050	-0.0005	0.0000	-0.0004	-0.0003
1068	1	1.33	0.66	0.0070	0.0145	0.0274	0.0	0.0176	0.3072	-0.0004	-0.0005	-0.0005	-0.0005
1069	1	1.33	0.66	0.0070	-0.0216	0.0274	0.0	0.0034	-0.3025	-0.0007	0.0007	-0.0001	-0.0007
1070	1	1.33	0.66	0.0070	-0.0302	0.0274	0.0	-0.0009	-0.3061	-0.0008	0.0003	0.0004	-0.0004
1071	1	1.33	0.66	0.0070	-0.0382	0.0274	0.0	-0.0046	-0.3094	-0.0010	0.0010	0.0003	-0.0007
1072	1	1.33	0.66	0.0070	-0.0246	0.0290	0.0	0.0018	-0.3033	-0.0007	0.0007	0.0000	-0.0004
1073	1	1.33	0.66	0.0070	-0.0246	0.0372	0.0	-0.0011	-0.3031	-0.0009	0.0007	-0.0000	-0.0005
1074	1	1.33	0.66	0.0070	-0.0246	0.0463	0.0	-0.0036	-0.3019	-0.0011	0.0008	0.0003	-0.0004
1075	1	1.33	0.66	0.0070	-0.0246	0.0557	0.0	-0.0056	-0.3008	-0.0012	0.0010	0.0004	-0.0005
1076	1	1.33	0.66	0.0070	-0.0246	0.0441	0.0	-0.0093	-0.3004	-0.0015	0.0009	0.0011	-0.0002
1077	1	1.33	0.66	0.0070	-0.0246	0.0260	0.0	0.0015	-0.3043	-0.0008	0.0007	0.0001	-0.0005
1078	1	1.33	0.66	0.0070	-0.0246	0.0101	0.0	0.0064	-0.3055	-0.0006	0.0003	-0.0004	-0.0004
1079	1	1.33	0.66	0.0070	-0.0244	-0.0099	0.0	0.0100	-0.3083	-0.0006	0.0002	-0.0004	-0.0004

Table V. (Continued)

ID	REG	P	MU	THO	THS	THF	AL	CM	CL	CM4DF	CM4DS	CL4DF	CL4DS
1080	1	1.33	0.66	0.0070	-0.0248	-0.0176	0.0	0.0138	-0.0086	-0.0006	0.0004	-0.0003	-0.0007
1085	1	2.32	0.78	0.0	-0.0185	0.0190	0.0	0.0151	-0.0217	-0.0058	0.0014	0.0015	0.0078
1086	1	2.32	0.78	0.0166	-0.0185	0.0190	0.0	0.0177	-0.0144	-0.0100	0.0005	0.0013	0.0078
1087	1	2.32	0.78	0.0340	-0.0187	0.0190	0.0	0.0211	-0.0049	-0.0084	0.0046	0.0045	0.0065
1088	1	2.32	0.78	0.0517	-0.0183	0.0190	0.0	0.0267	0.0083	-0.0032	0.0047	0.0055	0.0030
1090	1	2.32	0.78	0.0691	-0.0188	0.0190	0.0	0.0295	0.0169	-0.0024	0.0040	0.0048	0.0014
1089	1	2.32	0.78	0.0859	-0.0185	0.0190	0.0	0.0333	0.0269	-0.0021	0.0047	0.0051	0.0005
1091	1	2.32	0.78	0.0168	-0.0185	0.0190	0.0	0.0182	-0.0112	-0.0092	0.0014	0.0019	0.0069
1092	1	2.32	0.78	0.0344	-0.0400	0.0183	0.0	0.0159	-0.0176	-0.0057	0.0034	0.0034	0.0081
1093	1	2.32	0.78	0.0164	-0.0183	0.0185	0.0	0.0187	-0.0107	-0.0070	-0.0011	0.0006	0.0046
1094	1	2.32	0.78	0.0162	0.0009	0.0185	0.0	0.0232	-0.0022	-0.0035	0.0029	0.0029	0.0020
1095	1	2.32	0.78	0.0166	0.0185	0.0183	0.0	0.0291	0.0075	0.0005	0.0024	0.0024	-0.0020
1096	1	2.32	0.78	0.0164	0.0382	0.0183	0.0	0.0311	0.0144	0.0011	-0.0006	0.0001	-0.0023
1097	1	2.32	0.78	0.0161	0.0581	0.0183	0.0	0.0355	0.0253	0.0065	0.0009	0.0014	-0.0025
1098	1	2.32	0.78	0.0166	-0.0435	0.0187	0.0	0.0143	-0.0241	-0.0125	0.0009	0.0021	0.0103
1099	1	2.32	0.78	0.0166	-0.0777	0.0187	0.0	0.0081	-0.0352	-0.0178	0.0025	0.0049	0.0144
1100	1	2.32	0.78	0.0166	-0.0974	0.0185	0.0	0.0045	-0.0463	-0.0214	0.0050	0.0070	0.0145
1101	1	2.32	0.78	0.0162	-0.1086	0.0185	0.0	0.0030	-0.0503	-0.0219	0.0060	0.0082	0.0144
1102	1	2.32	0.78	0.0164	-0.0438	0.0187	0.0	0.0141	-0.0212	-0.0127	0.0019	0.0027	0.0102
1103	1	2.32	0.78	0.0166	-0.0436	0.0354	0.0	0.0074	-0.0233	-0.0130	-0.0039	-0.0024	0.0109
1104	1	2.32	0.78	0.0162	-0.0433	0.0537	0.0	0.0016	-0.0213	-0.0132	-0.0054	-0.0040	0.0111
1105	1	2.32	0.78	0.0164	-0.0433	0.0726	0.0	-0.0050	-0.0206	-0.0147	-0.0052	-0.0044	0.0122
1106	1	2.32	0.78	0.0164	-0.0433	0.0893	0.0	-0.0104	-0.0196	-0.0140	-0.0043	-0.0038	0.0122
1107	1	2.32	0.78	0.0164	-0.0394	0.0188	0.0	0.0144	-0.0230	-0.0122	0.0007	0.0015	0.0076
1109	1	2.32	0.78	0.0166	-0.0394	-0.0203	0.0	0.0297	-0.0266	-0.0105	0.0048	0.0058	0.0092
1108	1	2.32	0.78	0.0164	-0.0394	-0.0564	0.0	0.0430	-0.0279	-0.0057	0.0088	0.0104	0.0074
1110	1	2.32	0.78	0.0164	-0.0391	-0.0741	0.0	0.0507	-0.0258	-0.0003	0.0141	0.0143	0.0044
1113	1	2.32	1.07	0.0	-0.0157	0.0216	0.0	0.0153	-0.0177	-0.0143	0.0019	0.0017	0.0106
1120	1	2.32	1.07	0.0171	-0.0152	0.0216	0.0	0.0197	-0.0076	-0.0115	0.0047	0.0041	0.0094
1121	1	2.32	1.07	0.0344	-0.0152	0.0216	0.0	0.0290	0.0119	-0.0071	0.0047	0.0047	0.0043
1122	1	2.32	1.07	0.0527	-0.0154	0.0216	0.0	0.0336	0.0249	-0.0051	0.0024	0.0030	0.0026
1123	1	2.32	1.07	0.0698	-0.0152	0.0216	0.0	0.0433	0.0442	0.0000	0.0115	0.0104	-0.0022
1124	1	2.32	1.07	0.0166	-0.0157	0.0214	0.0	0.0202	-0.0070	-0.0113	0.0046	0.0031	0.0093
1125	1	2.32	1.06	0.0164	-0.0197	0.0182	0.0	0.0170	-0.0167	-0.0162	0.0039	0.0049	0.0122
1126	1	2.32	1.06	0.0164	-0.0173	0.0182	0.0	0.0241	-0.0031	-0.0091	0.0018	0.0022	0.0055
1127	1	2.32	1.06	0.0166	0.0019	0.0182	0.0	0.0305	0.0076	-0.0070	0.0053	0.0049	0.0046
1128	1	2.32	1.06	0.0166	0.0199	0.0182	0.0	0.0366	0.0183	-0.0016	0.0030	0.0026	-0.0006
1129	1	2.32	1.06	0.0166	0.0368	0.0182	0.0	0.0444	0.0336	0.0057	0.0002	0.0074	-0.0045
1130	1	2.32	1.06	0.0166	-0.0380	0.0182	0.0	0.0148	-0.0210	-0.0158	-0.0002	0.0014	0.0122
1131	1	2.32	1.06	0.0166	-0.0578	0.0182	0.0	0.0082	-0.0350	-0.0223	0.0032	0.0041	0.0159
1132	1	2.32	1.06	0.0162	-0.0769	0.0180	0.0	0.0019	-0.0471	-0.0271	0.0019	0.0044	0.0182
1133	1	2.32	1.06	0.0166	-0.0377	0.0182	0.0	0.0153	-0.0197	-0.0155	0.0054	0.0045	0.0117
1134	1	2.32	1.06	0.0166	-0.0377	-0.0017	0.0	0.0239	-0.0207	-0.0172	0.0099	0.0098	0.0116
1135	1	2.32	1.06	0.0164	-0.0377	-0.0199	0.0	0.0326	-0.0214	-0.0157	0.0128	0.0124	0.0098
1136	1	2.32	1.06	0.0164	-0.0374	-0.0393	0.0	0.0418	-0.0207	-0.0126	0.0164	0.0147	0.0054
1137	1	2.32	1.06	0.0164	-0.0374	-0.0574	0.0	0.0497	-0.0231	-0.0111	0.0231	0.0220	0.0092

Table V. (Continued)

ID	CFG	P	MII	THO	THS	THC	AL	CM	CI	CM4PC	CM4PS	CL4PC	CI4PS
1138	1	2.32	1.06	-0.0166	-0.0374	0.0164	0.0	0.0164	-0.0191	-0.0146	0.0014	0.0029	0.0106
1139	1	2.32	1.06	0.0166	-0.0374	0.0360	0.0	0.0073	-0.0191	-0.0181	-0.0006	0.0007	0.0138
1140	1	2.32	1.06	0.0164	-0.0374	0.0522	0.0	0.0010	-0.0167	-0.0163	-0.0021	-0.0055	0.0129
1141	1	2.32	1.06	0.0166	-0.0372	0.0718	0.0	-0.0095	-0.0191	-0.0189	-0.0023	-0.0023	0.0174
1145	1	2.32	1.44	0.0	-0.0131	0.0257	0.0	0.0159	-0.0177	-0.0151	0.0055	0.0064	0.0107
1146	1	2.32	1.44	0.0173	-0.0133	0.0257	0.0	0.0761	0.0045	-0.0106	0.0072	0.0072	0.0049
1147	1	2.32	1.44	0.0344	-0.0133	0.0257	0.0	0.0402	0.0343	-0.0029	0.0120	0.0112	0.0003
1148	1	2.32	1.44	0.0426	-0.0131	0.0255	0.0	0.0448	0.0469	-0.0054	0.0116	0.0104	0.0016
1149	1	2.32	1.44	0.0075	-0.0131	0.0255	0.0	0.0203	-0.0092	-0.0137	0.0078	0.0075	0.0092
1150	1	2.32	1.44	0.0075	-0.0250	0.0241	0.0	0.0153	-0.0190	-0.0159	0.0047	0.0061	0.0105
1151	1	2.32	1.44	0.0075	-0.0068	0.0241	0.0	0.0261	-0.0003	-0.0131	0.0054	0.0046	0.0092
1152	1	2.32	1.44	0.0075	0.0119	0.0241	0.0	0.0350	0.0127	-0.0044	0.0054	0.0053	0.0017
1153	1	2.32	1.44	0.0075	0.0257	0.0250	0.0	0.0465	0.0337	0.0016	0.0184	0.0135	-0.0041
1154	1	2.32	1.44	0.0075	-0.0239	0.0250	0.0	0.0143	-0.0175	-0.0167	0.0054	0.0068	0.0117
1155	1	2.32	1.44	0.0075	-0.0433	0.0250	0.0	0.0027	-0.0374	-0.0345	0.0011	0.0099	0.0174
1156	1	2.32	1.44	0.0075	-0.0332	0.0250	0.0	0.0085	-0.0276	-0.0217	0.0027	0.0132	0.0142
1157	1	2.32	1.44	0.0075	-0.0255	0.0241	0.0	0.0122	-0.0211	-0.0245	0.0012	0.0069	0.0175
1158	1	2.32	1.44	0.0077	-0.0256	0.0419	0.0	0.0017	-0.0238	-0.0232	-0.0013	0.0047	0.0181
1159	1	2.32	1.44	0.0075	-0.0257	0.0500	0.0	-0.0087	-0.0239	0.0073	-0.0050	-0.0055	-0.0045
1160	1	2.32	1.44	0.0073	-0.0257	0.0216	0.0	0.0130	-0.0230	-0.0193	0.0084	0.0112	0.0112
1161	1	2.32	1.44	0.0075	-0.0257	0.0044	0.0	0.0244	-0.0201	-0.0159	0.0145	0.0171	0.0073
1162	1	2.32	1.44	0.0075	-0.0258	-0.0141	0.0	0.0342	-0.0197	-0.0146	0.0215	0.0219	0.0014
1163	1	2.32	1.44	0.0075	-0.0258	-0.0291	0.0	0.0448	-0.0160	-0.0121	0.0212	0.0222	-0.0016
1165	1	2.32	1.75	0.0	-0.0110	0.0208	0.0	0.0204	-0.0121	-0.0156	0.0047	0.0093	0.0098
1166	1	2.32	1.75	0.0079	-0.0110	0.0208	0.0	0.0294	0.0031	-0.0091	0.0154	0.0150	0.0012
1167	1	2.32	1.75	0.0175	-0.0110	0.0208	0.0	0.0357	0.0195	-0.0092	0.0166	0.0159	0.0008
1169	1	2.32	1.75	0.0257	-0.0110	0.0208	0.0	0.0443	0.0352	-0.0073	0.0140	0.0140	0.0010
168	3	2.32	0.50	0.0009	-0.0173	0.0164	0.0	0.0096	-0.0111	-0.0072	0.0015	0.0026	0.0078
169	3	2.32	0.50	0.0178	-0.0176	0.0168	0.0	0.0106	-0.0066	-0.0074	0.0006	0.0016	0.0077
170	3	2.32	0.50	0.0353	-0.0173	0.0164	0.0	0.0141	0.0011	-0.0052	0.0024	0.0035	0.0040
171	3	2.32	0.50	0.0531	-0.0178	0.0164	0.0	0.0171	0.0079	-0.0026	0.0015	0.0029	0.0023
172	3	2.32	0.50	0.0702	-0.0173	0.0164	0.0	0.0211	0.0170	-0.0017	0.0025	0.0034	0.0010
173	3	2.32	0.50	0.0873	-0.0173	0.0161	0.0	0.0238	0.0232	0.0006	0.0032	0.0033	-0.0017
175	3	2.32	0.50	0.0176	-0.0394	0.0164	0.0	0.0093	-0.0133	-0.0094	0.0011	0.0022	0.0091
176	3	2.32	0.50	0.0176	-0.0202	0.0161	0.0	0.0106	-0.0074	-0.0070	0.0011	0.0021	0.0072
177	3	2.32	0.50	0.0174	-0.0014	0.0166	0.0	0.0146	0.0004	-0.0041	0.0013	0.0021	0.0040
178	3	2.32	0.50	0.0176	0.0176	0.0164	0.0	0.0194	0.0074	-0.0021	-0.0003	0.0003	0.0013
179	3	2.32	0.50	0.0176	0.0365	0.0161	0.0	0.0204	0.0129	0.0012	-0.0031	-0.0029	-0.0018
180	3	2.32	0.50	0.0178	-0.0339	0.0164	0.0	0.0088	-0.0127	-0.0090	-0.0001	0.0012	0.0027
181	3	2.32	0.50	0.0176	-0.0780	0.0161	0.0	0.0031	-0.0282	-0.0129	0.0030	0.0053	0.0143
182	3	2.32	0.50	0.0175	-0.0981	0.0161	0.0	0.0003	-0.0361	-0.0142	0.0041	0.0049	0.0178
183	3	2.32	0.50	0.0175	-0.0340	0.0165	0.0	0.0090	-0.0114	-0.0070	-0.0012	-0.0000	0.0070
184	3	2.32	0.50	0.0175	-0.0340	0.0340	0.0	0.0016	-0.0129	-0.0101	0.0002	0.0014	0.0110
185	3	2.32	0.50	0.0173	-0.0344	0.0531	0.0	-0.0044	-0.0111	-0.0096	-0.0000	-0.0003	0.0110
186	3	2.32	0.50	0.0173	-0.0344	0.0714	0.0	-0.0106	-0.0105	-0.0113	-0.0035	-0.0034	0.0112
187	3	2.32	0.50	0.0173	-0.0340	0.0922	0.0	-0.0140	-0.0091	-0.0106	-0.0033	-0.0032	0.0129

Table V. (Continued)

ID	CFG	P	MII	THO	THS	THC	AL	CM	CL	CM4DC	CM4DS	CL4DC	CL4DS
189	3	2.32	0.58	0.0173	-0.0347	0.0146	0.0	0.0097	-0.0116	-0.0090	0.0004	0.0017	0.0076
190	3	2.32	0.58	0.0173	-0.0347	-0.0209	0.0	0.0224	-0.0135	-0.0085	0.0053	0.0071	0.0095
190	3	2.32	0.58	0.0173	-0.0347	-0.0578	0.0	0.0351	-0.0169	-0.0076	0.0083	0.0110	0.0073
193	3	2.32	0.80	-0.0005	-0.0183	0.0227	0.0	0.0060	-0.0134	-0.0104	0.0001	0.0015	0.0114
194	3	2.32	0.80	0.0176	-0.0185	0.0227	0.0	0.0124	-0.0010	-0.0078	0.0020	0.0042	0.0079
195	3	2.32	0.80	0.0354	-0.0188	0.0223	0.0	0.0172	0.0101	-0.0062	0.0029	0.0044	0.0059
196	3	2.32	0.80	0.0525	-0.0187	0.0223	0.0	0.0212	0.0203	-0.0020	0.0029	0.0044	0.0011
197	3	2.32	0.80	0.0695	-0.0185	0.0223	0.0	0.0245	0.0287	-0.0021	0.0039	0.0052	0.0007
198	3	2.32	0.80	0.0175	-0.0185	0.0223	0.0	0.0112	-0.0022	-0.0093	0.0019	0.0034	0.0093
199	3	2.32	0.80	0.0176	-0.0398	0.0171	0.0	0.0086	-0.0107	-0.0123	0.0015	0.0039	0.0129
200	3	2.32	0.80	0.0176	-0.0195	0.0171	0.0	0.0134	-0.0010	-0.0090	0.0010	0.0024	0.0079
201	3	2.32	0.80	0.0176	-0.0014	0.0173	0.0	0.0197	0.0097	-0.0043	0.0036	0.0047	0.0036
202	3	2.32	0.80	0.0176	0.0176	0.0171	0.0	0.0235	0.0165	-0.0023	0.0014	0.0024	0.0014
203	3	2.32	0.80	0.0176	-0.0408	0.0173	0.0	0.0078	-0.0133	-0.0124	0.0014	0.0038	0.0131
204	3	2.32	0.80	0.0176	-0.0595	0.0171	0.0	0.0043	-0.0213	-0.0143	0.0024	0.0050	0.0154
205	3	2.32	0.80	0.0175	-0.0681	0.0173	0.0	0.0011	-0.0283	-0.0105	0.0041	0.0076	0.0129
206	3	2.32	0.80	0.0176	-0.0363	0.0199	0.0	0.0060	-0.0129	-0.0129	0.0014	0.0030	0.0137
207	3	2.32	0.80	0.0176	-0.0365	0.0392	0.0	0.0012	-0.0092	-0.0136	-0.0012	-0.0006	0.0143
208	3	2.32	0.80	0.0176	-0.0365	0.0589	0.0	-0.0062	-0.0098	-0.0132	-0.0061	-0.0050	0.0152
209	3	2.32	0.80	0.0176	-0.0365	0.0661	0.0	-0.0107	-0.0100	-0.0157	-0.0059	-0.0047	0.0192
210	3	2.32	0.80	0.0175	-0.0363	0.0205	0.0	0.0070	-0.0125	-0.0154	0.0020	0.0040	0.0140
211	3	2.32	0.80	0.0175	-0.0380	0.0016	0.0	0.0153	-0.0129	-0.0140	0.0043	0.0087	0.0139
212	3	2.32	0.80	0.0175	-0.0382	-0.0333	0.0	0.0288	-0.0162	-0.0109	0.0100	0.0134	0.0103
213	3	2.32	0.80	0.0175	-0.0382	-0.0143	0.0	0.0199	-0.0147	-0.0119	0.0061	0.0038	0.0116
233	3	1.55	0.20	0.0	-0.0131	0.0136	0.0	0.0019	-0.0036	0.0004	0.0003	-0.0001	0.0007
234	3	1.55	0.20	0.0175	-0.0131	0.0136	0.0	0.0043	-0.0013	0.0006	0.0002	-0.0001	0.0002
235	3	1.55	0.20	0.0347	-0.0131	0.0136	0.0	0.0067	0.0007	0.0004	-0.0003	0.0000	-0.0001
236	3	1.55	0.20	0.0524	-0.0131	0.0136	0.0	0.0092	0.0029	0.0006	-0.0000	0.0003	-0.0004
237	3	1.55	0.20	0.0340	-0.0127	0.0138	0.0	0.0068	0.0005	0.0007	-0.0001	-0.0001	-0.0002
238	3	1.55	0.20	0.0525	-0.0136	0.0136	0.0	0.0094	0.0029	0.0008	-0.0001	0.0001	-0.0005
239	3	1.55	0.20	0.0700	-0.0127	0.0133	0.0	0.0122	0.0057	0.0009	-0.0004	-0.0002	-0.0009
240	3	1.55	0.20	0.0169	-0.0237	0.0143	0.0	0.0022	-0.0036	0.0003	0.0004	-0.0000	0.0003
241	3	1.55	0.20	0.0169	-0.0021	0.0143	0.0	0.0075	0.0014	0.0007	0.0001	-0.0000	0.0001
242	3	1.55	0.20	0.0169	0.0161	0.0143	0.0	0.0091	0.0043	0.0006	-0.0000	-0.0002	-0.0001
243	3	1.55	0.20	0.0169	0.0347	0.0147	0.0	0.0115	0.0093	0.0008	-0.0002	-0.0001	-0.0002
244	3	1.55	0.20	0.0169	-0.0229	0.0143	0.0	0.0022	-0.0035	0.0004	0.0003	-0.0000	0.0003
245	3	1.55	0.20	0.0169	-0.0606	0.0143	0.0	-0.0032	-0.0123	0.0000	0.0006	-0.0001	0.0006
247	3	1.55	0.20	0.0168	-0.0230	0.0143	0.0	0.0021	-0.0039	0.0004	0.0001	-0.0001	0.0003
248	3	1.55	0.20	0.0168	-0.0236	0.0143	0.0	0.0025	-0.0034	0.0005	0.0003	-0.0000	0.0003
249	3	1.55	0.20	0.0168	-0.0236	0.0321	0.0	-0.0022	-0.0021	0.0003	0.0002	0.0002	0.0003
250	3	1.55	0.20	0.0169	-0.0239	0.0496	0.0	-0.0056	0.0001	-0.0001	0.0004	-0.0000	0.0002
251	3	1.55	0.20	0.0169	-0.0236	0.0663	0.0	-0.0121	0.0013	-0.0001	0.0004	-0.0000	0.0004
252	3	1.55	0.20	0.0169	-0.0236	0.0147	0.0	0.0022	-0.0036	0.0004	0.0003	0.0000	0.0004
253	3	1.55	0.20	0.0168	-0.0243	-0.0058	0.0	0.0075	-0.0042	0.0006	0.0001	0.0001	0.0004
254	3	1.55	0.20	0.0168	-0.0239	-0.0234	0.0	0.0124	-0.0047	0.0006	0.0003	0.0002	0.0006
255	3	1.55	0.20	0.0169	-0.0239	-0.0175	0.0	0.0168	-0.0098	0.0009	0.0003	0.0003	0.0009

Table V. (Continued)

ID	CFG	P	MU	THO	THS	THC	SL	CM	CL	CM4PC	CM4PS	CL4PC	CL4PS
256	3	1.55	0.20	0.0168	-0.0239	0.0149	0.0	0.0020	-0.3037	0.0005	0.0002	0.0001	0.0004
257	3	1.55	0.40	0.0002	-0.0157	0.0173	0.0	0.0022	-0.3037	0.0006	0.0003	-0.0001	0.0008
258	3	1.55	0.40	0.0175	-0.0154	0.0173	0.0	0.0052	-0.0005	0.0007	0.0002	-0.0002	0.0004
259	3	1.55	0.40	0.0351	-0.0152	0.0173	0.0	0.0092	0.3033	0.0009	-0.0000	0.0000	0.0003
260	3	1.55	0.40	0.0513	-0.0154	0.0173	0.0	0.0111	0.3067	0.0011	-0.0004	-0.0001	-0.0002
261	3	1.55	0.40	0.0171	-0.0298	0.0176	0.0	0.0021	-0.3033	0.0007	0.0003	0.0000	0.0007
262	3	1.55	0.40	0.0171	-0.0073	0.0176	0.0	0.0067	0.3018	0.0006	0.0001	-0.0003	0.0004
263	3	1.55	0.40	0.0171	0.0120	0.0176	0.0	0.0104	0.3063	0.0009	-0.0001	-0.0002	0.0004
264	3	1.55	0.40	0.0171	0.0152	0.0176	0.0	0.0123	0.3093	0.0009	-0.0005	-0.0005	0.0002
265	3	1.55	0.40	0.0173	-0.0298	0.0179	0.0	0.0017	-0.3041	0.0006	0.0005	0.0000	0.0007
266	3	1.55	0.40	0.0166	-0.0476	0.0176	0.0	-0.0013	-0.3082	0.0004	0.0004	-0.0000	0.0007
267	3	1.55	0.40	0.0173	-0.0613	0.0178	0.0	-0.0041	-0.3126	0.0005	0.0005	-0.0000	0.0004
268	3	1.55	0.40	0.0171	-0.0294	0.0178	0.0	0.0020	-0.3035	0.0008	0.0001	-0.0000	0.0007
269	3	1.55	0.40	0.0169	-0.0284	0.0384	0.0	-0.0034	-0.3011	0.0004	0.0005	0.0004	0.0004
270	3	1.55	0.40	0.0171	-0.0283	0.0501	0.0	-0.0066	-0.3000	0.0003	0.0005	-0.0001	0.0004
271	3	1.55	0.40	0.0169	-0.0283	0.0579	0.0	-0.0098	0.3008	0.0002	0.0005	0.0003	0.0003
272	3	1.55	0.40	0.0168	-0.0283	0.0176	0.0	0.0022	-0.3030	0.0005	0.0004	-0.0000	0.0008
273	3	1.55	0.40	0.0171	-0.0288	-0.0033	0.0	0.0093	-0.3053	0.0009	0.0002	-0.0001	0.0007
274	3	1.55	0.40	0.0173	-0.0284	-0.0195	0.0	0.0126	-0.3078	0.0009	-0.0002	0.0002	0.0007
275	3	1.55	0.40	0.0171	-0.0288	-0.0276	0.0	0.0143	-0.3092	0.0009	0.0001	-0.0003	0.0009
292	3	1.55	0.54	-0.0002	-0.0173	0.0223	0.0	0.0020	-0.3032	0.0007	0.0004	0.0003	0.0009
293	3	1.55	0.54	0.0094	-0.0171	0.0223	0.0	0.0042	-0.3005	0.0005	0.0004	0.0003	0.0009
294	3	1.55	0.54	0.0180	-0.0173	0.0223	0.0	0.0066	0.3028	0.0004	-0.0001	-0.0001	0.0004
295	3	1.55	0.54	0.0267	-0.0173	0.0223	0.0	0.0089	0.3057	0.0004	-0.0003	-0.0001	0.0004
296	3	1.55	0.54	0.0353	-0.0178	0.0223	0.0	0.0120	0.3094	0.0004	-0.0008	-0.0002	0.0002
304	3	1.55	0.54	0.0094	-0.0176	0.0204	0.0	0.0051	-0.3002	0.0005	0.0004	0.0001	0.0008
305	3	1.55	0.54	0.0093	-0.0176	0.0375	0.0	-0.0002	0.3011	0.0004	0.0005	0.0004	0.0009
306	3	1.55	0.54	0.0093	-0.0173	0.0565	0.0	-0.0070	0.3026	0.0002	0.0008	0.0010	0.0005
307	3	1.55	0.54	0.0093	-0.0176	0.0223	0.0	0.0044	0.3004	0.0004	-0.0003	0.0005	0.0004
308	3	1.55	0.54	0.0093	-0.0173	0.0024	0.0	0.0095	-0.3027	0.0003	-0.0003	-0.0000	0.0006
309	3	1.55	0.54	0.0093	-0.0176	-0.0161	0.0	0.0156	-0.3042	0.0004	-0.0005	-0.0003	0.0007
310	3	1.55	0.66	0.0002	-0.0101	0.0259	0.0	0.0052	0.3007	0.0009	0.0001	0.0001	0.0013
311	3	1.55	0.66	0.0091	-0.0101	0.0257	0.0	0.0084	0.3047	0.0009	-0.0002	0.0002	0.0011
312	3	1.55	0.66	0.0183	-0.0101	0.0258	0.0	0.0110	0.3081	0.0008	-0.0005	-0.0004	0.0004
313	3	1.55	0.66	0.0246	-0.0105	0.0258	0.0	0.0126	0.3101	0.0010	-0.0007	-0.0007	0.0005
314	3	1.55	0.66	0.0086	-0.0218	0.0214	0.0	0.0037	-0.3020	0.0010	0.0000	0.0001	0.0008
316	3	1.55	0.66	0.0086	0.0086	0.0213	0.0	0.0166	0.3117	0.0009	-0.0005	-0.0010	0.0011
317	3	1.55	0.66	0.0086	-0.0199	0.0214	0.0	0.0057	0.3004	0.0005	0.0005	-0.0001	0.0009
318	3	1.55	0.66	0.0086	-0.0408	0.0216	0.0	-0.0023	-0.3091	0.0012	0.0011	0.0003	0.0006
319	3	1.55	0.66	0.0086	-0.0211	0.0239	0.0	0.0043	-0.3004	0.0007	0.0003	0.0001	0.0008
320	3	1.55	0.66	0.0086	-0.0211	0.0438	0.0	-0.0015	0.3018	0.0010	0.0010	0.0008	0.0009
321	3	1.55	0.66	0.0086	-0.0206	0.0623	0.0	-0.0073	0.0033	0.0006	0.0010	0.0012	0.0004
322	3	1.55	0.66	0.0087	-0.0211	0.0257	0.0	0.0048	0.3005	0.0011	0.0004	0.0001	0.0011
323	3	1.55	0.66	0.0087	-0.0200	0.0070	0.0	0.0038	-0.3020	0.0009	-0.0002	-0.0005	0.0008
324	3	1.55	0.66	0.0094	-0.0213	-0.0119	0.0	0.0158	-0.3040	0.0012	-0.0002	-0.0010	0.0007
330	3	1.73	0.36	-0.0002	-0.0079	0.0154	0.0	0.0042	-0.3035	-0.0003	0.0002	-0.0030	0.0005

Table V. (Continued)

FAT DATA ANALYSIS 72.07.25

ID	CFG	P	MII	THO	THS	THC	AL	CM	CL	CM4DC	CM4DS	CL4DC	CL4DS
331	3	1.73	0.36	0.0180	-0.0070	0.0154	0.0	0.0074	0.0000	0.0000	0.0000	0.0001	0.0000
332	3	1.73	0.36	0.0354	-0.0070	0.0154	0.0	0.0095	0.0030	0.0004	-0.0007	-0.0006	0.0001
334	3	1.73	0.36	0.0702	-0.0070	0.0150	0.0	0.0156	0.0107	0.0010	-0.0009	-0.0012	-0.0008
335	3	1.73	0.36	0.0176	-0.0161	0.0175	0.0	0.0045	-0.0020	-0.0001	0.0001	-0.0001	0.0002
336	3	1.73	0.36	0.0176	0.0012	0.0176	0.0	0.0095	0.0022	0.0001	-0.0000	-0.0000	0.0002
337	3	1.73	0.36	0.0176	0.0100	0.0175	0.0	0.0105	0.0063	0.0004	-0.0005	-0.0004	0.0002
338	3	1.73	0.36	0.0175	0.0365	0.0176	0.0	0.0129	0.0110	0.0001	-0.0003	-0.0001	0.0003
339	3	1.73	0.36	0.0173	-0.0160	0.0170	0.0	0.0044	-0.0022	-0.0001	0.0003	0.0001	0.0000
340	3	1.73	0.36	0.0175	-0.0387	0.0174	0.0	0.0010	-0.0087	-0.0001	0.0003	0.0005	0.0003
341	3	1.73	0.36	0.0175	-0.0565	0.0176	0.0	-0.0016	-0.0141	0.0002	0.0001	0.0004	0.0008
342	3	1.73	0.36	0.0175	-0.0695	0.01	0.0	-0.0030	-0.0172	0.0002	0.0002	0.0006	0.0014
343	3	1.73	0.36	0.0175	-0.0240	0.0141	0.0	0.0054	-0.0024	-0.0001	0.0001	-0.0000	0.0003
344	3	1.73	0.36	0.0175	-0.0140	0.0326	0.0	0.0010	0.0000	-0.0002	0.0005	0.0002	0.0002
345	3	1.73	0.36	0.0175	-0.0140	0.0456	0.0	-0.0045	0.0006	0.0001	0.0000	0.0000	0.0003
346	3	1.73	0.36	0.0176	-0.0143	0.0491	0.0	-0.0109	0.0017	-0.0000	0.0002	-0.0004	0.0004
347	3	1.73	0.36	0.0175	-0.0143	0.0147	0.0	0.0057	-0.0020	-0.0001	0.0000	0.0000	0.0003
348	3	1.73	0.36	0.0175	-0.0138	-0.0052	0.0	0.0115	-0.0039	0.0001	0.0002	0.0001	0.0002
349	3	1.73	0.36	0.0178	-0.0138	-0.0236	0.0	0.0172	-0.0061	-0.0000	0.0003	0.0001	0.0001
350	3	1.73	0.36	0.0178	-0.0140	-0.0415	0.0	0.0237	-0.0066	0.0000	0.0001	-0.0005	-0.0001
352	3	1.73	0.40	-0.0002	-0.0065	0.0133	0.0	0.0074	-0.0023	-0.0003	0.0000	0.0002	0.0010
353	3	1.73	0.40	0.0180	-0.0065	0.0133	0.0	0.0100	0.0023	-0.0003	-0.0006	-0.0002	0.0008
354	3	1.73	0.40	0.0354	-0.0065	0.0136	0.0	0.0143	0.0089	-0.0000	-0.0010	-0.0006	0.0004
355	3	1.73	0.40	0.0438	-0.0065	0.0133	0.0	0.0151	0.0104	-0.0001	-0.0014	-0.0009	0.0007
356	3	1.73	0.40	0.0175	-0.0178	0.0171	0.0	0.0065	-0.0009	-0.0001	-0.0003	-0.0002	0.0006
359	3	1.73	0.40	0.0175	-0.0180	0.0171	0.0	0.0059	-0.0013	-0.0001	-0.0003	-0.0001	0.0004
360	3	1.73	0.40	0.0175	-0.0394	0.0171	0.0	0.0033	-0.0071	0.0002	0.0001	0.0005	0.0007
361	3	1.73	0.40	0.0176	-0.0598	0.0168	0.0	-0.0005	-0.0145	0.0006	0.0004	0.0005	0.0010
362	3	1.73	0.40	0.0173	-0.0187	0.0159	0.0	0.0071	-0.0006	-0.0002	0.0001	0.0000	0.0006
363	3	1.73	0.40	0.0175	-0.0185	0.0344	0.0	0.0020	0.0011	-0.0000	0.0002	0.0004	0.0003
364	3	1.73	0.40	0.0175	-0.0185	0.0509	0.0	-0.0038	0.0012	0.0000	0.0010	0.0005	0.0003
365	3	1.73	0.40	0.0175	-0.0187	0.0484	0.0	-0.0092	0.0026	0.0000	0.0014	0.0001	-0.0001
366	3	1.73	0.40	0.0175	-0.0197	0.0188	0.0	0.0059	-0.0004	-0.0002	-0.0001	0.0002	0.0004
367	3	1.73	0.40	0.0173	-0.0192	-0.0045	0.0	0.0127	-0.0027	-0.0003	-0.0004	-0.0000	0.0007
368	3	1.73	0.40	0.0173	-0.0190	-0.0206	0.0	0.0171	-0.0050	-0.0004	-0.0008	-0.0006	0.0007
369	3	1.73	0.40	0.0176	-0.0187	-0.0307	0.0	0.0207	-0.0056	-0.0005	-0.0010	-0.0011	0.0005
373	3	1.73	0.66	-0.0003	-0.0113	0.0143	0.0	0.0082	-0.0020	-0.0002	0.0002	-0.0003	0.0012
374	3	1.73	0.66	0.0180	-0.0113	0.0147	0.0	0.0134	0.0071	-0.0001	-0.0008	-0.0002	0.0010
375	3	1.73	0.66	0.0266	-0.0112	0.0147	0.0	0.0170	0.0138	-0.0004	-0.0013	-0.0000	0.0012
376	3	1.73	0.66	0.0087	-0.0113	0.0147	0.0	0.0107	0.0023	-0.0004	-0.0007	-0.0000	0.0013
377	3	1.73	0.66	0.0087	-0.0152	0.0188	0.0	0.0095	0.0013	-0.0001	-0.0003	-0.0003	0.0014
378	3	1.73	0.66	0.0087	0.0005	0.0188	0.0	0.0148	0.0094	-0.0007	-0.0005	0.0003	0.0022
379	3	1.73	0.66	0.0087	0.0070	0.0187	0.0	0.0162	0.0123	-0.0007	-0.0012	-0.0001	0.0022
380	3	1.73	0.66	0.0087	0.0174	0.0183	0.0	0.0190	0.0173	-0.0012	-0.0009	-0.0003	0.0020
381	3	1.73	0.66	0.0087	-0.0145	0.0183	0.0	0.0030	0.0032	-0.0003	-0.0003	0.0004	0.0010
382	3	1.73	0.66	0.0087	-0.0232	0.0183	0.0	0.0066	-0.0015	0.0003	0.0004	0.0005	0.0011
383	3	1.73	0.66	0.0087	-0.0321	0.0183	0.0	0.0042	-0.0059	0.0005	0.0007	0.0001	0.0004

Table V. (Continued)

ID	CFG	P	MII	THO	THS	THC	AL	CM	CL	CM4PC	CM4PS	CL4PC	CL4PS
384	3	1.73	0.44	0.0087	-0.0435	0.0183	0.0	0.0002	-0.0134	0.0010	0.0006	-0.0002	0.0007
385	3	1.73	0.44	0.0087	-0.0178	0.0178	0.0	0.0079	0.3004	0.0002	0.0006	0.0001	0.0010
386	3	1.73	0.44	0.0086	-0.0180	0.0337	0.0	0.0028	0.3015	-0.0003	0.0008	0.0010	0.0010
387	3	1.73	0.44	0.0086	-0.0180	0.0424	0.0	0.0007	0.0029	0.0001	0.0011	0.0009	0.0004
388	3	1.73	0.44	0.0087	-0.0180	0.0503	0.0	-0.0037	0.0005	0.0004	0.0012	0.0006	0.0001
389	3	1.73	0.44	0.0086	-0.0180	0.0187	0.0	0.0086	0.3017	-0.0001	-0.0001	0.0008	0.0013
390	3	1.73	0.44	0.0086	-0.0178	-0.0002	0.0	0.0125	-0.3034	-0.0001	-0.0008	-0.0004	0.0014
393	3	1.73	0.80	0.0	-0.0180	0.0234	0.0	0.0055	-0.3021	-0.0000	0.0001	0.0006	0.0011
394	3	1.73	0.80	0.0086	-0.0180	0.0236	0.0	0.0009	0.3035	-0.0005	0.0001	0.0004	0.0012
395	3	1.73	0.80	0.0174	-0.0178	0.0234	0.0	0.0123	0.3007	-0.0010	-0.0003	0.0005	0.0014
396	3	1.73	0.80	0.0262	-0.0178	0.0239	0.0	0.0142	0.3122	-0.0007	-0.0007	0.0000	0.0014
397	3	1.73	0.80	0.0002	-0.0180	0.0264	0.0	0.0044	-0.3026	-0.0003	0.0010	0.0010	0.0008
398	3	1.73	0.80	0.0002	-0.0080	0.0262	0.0	0.0076	0.3017	-0.0004	0.0003	0.0007	0.0013
399	3	1.73	0.80	0.0002	0.0024	0.0262	0.0	0.0142	0.3109	-0.0014	-0.0002	0.0008	0.0022
400	3	1.73	0.80	0.0002	0.0133	0.0262	0.0	0.0182	0.3177	-0.0018	-0.0014	0.0000	0.0021
401	3	1.73	0.80	0.0002	-0.0185	0.0264	0.0	0.0073	-0.0038	-0.0000	0.0004	0.0002	0.0011
402	3	1.73	0.80	0.0002	-0.0183	0.0155	0.0	0.0116	-0.0046	0.0002	-0.0005	-0.0002	0.0020
403	3	1.73	0.80	0.0002	-0.0187	0.0040	0.0	0.0185	-0.3044	-0.0000	-0.0011	-0.0004	0.0022
1181	1	2.32	0.78	-0.0003	0.0024	-0.0021	0.0	0.0255	-0.3133	-0.0073	0.0032	0.0035	0.0051
1198	1	2.32	0.78	-0.0017	0.0002	-0.0005	-0.0262	0.0220	-0.3215	-0.0040	0.0011	0.0017	0.0043
1215	1	2.32	0.78	0.0002	-0.0026	0.0003	-0.0524	0.0179	-0.3288	-0.0092	0.0012	0.0013	0.0047
1182	1	2.32	1.07	-0.0003	0.0017	-0.0029	0.0	0.0231	-0.3107	-0.0077	0.0044	0.0046	0.0048
1199	1	2.32	1.07	-0.0017	0.0031	-0.0009	-0.0262	0.0225	-0.3250	-0.0111	0.0004	0.0020	0.0077
1216	1	2.32	1.07	0.0003	-0.0014	-0.0007	-0.0524	0.0145	-0.3400	-0.0150	-0.0048	-0.0017	0.0129
1183	1	2.32	1.44	-0.0003	0.0021	-0.0035	0.0	0.0371	-0.3073	-0.0042	0.0155	0.0179	-0.0024
1200	1	2.32	1.44	-0.0017	0.0021	-0.0003	-0.0262	0.0209	-0.3294	-0.0121	0.0008	0.0082	0.0190
1194	1	2.32	1.77	-0.0002	0.0021	-0.0045	0.0	0.0543	0.3036	0.0022	0.0221	0.0189	-0.0179
1201	1	2.32	1.77	-0.0016	0.0010	-0.0005	-0.0262	0.0259	-0.0225	-0.0237	0.0030	0.0120	0.0300
1196	1	1.56	0.43	-0.0002	0.0017	-0.0040	0.0	0.0106	-0.3061	-0.0002	-0.0001	-0.0002	0.0008
1203	1	1.56	0.43	-0.0017	-0.0023	0.0003	-0.0262	0.0050	-0.3049	0.0001	-0.0001	0.0000	-0.0000
1218	1	1.56	0.43	0.0005	-0.0023	-0.0023	-0.0524	0.0055	-0.3098	-0.0003	0.0001	0.0001	0.0010
1197	1	1.56	0.58	-0.0002	0.0021	-0.0040	0.0	0.0141	-0.3043	-0.0006	-0.0003	-0.0002	0.0003
1204	1	1.56	0.58	-0.0017	-0.0024	0.0010	-0.0262	0.0096	-0.3070	-0.0004	-0.0001	0.0002	0.0013
1219	1	1.56	0.58	0.0005	-0.0014	-0.0023	-0.0524	0.0067	-0.3119	-0.0004	0.0005	0.0006	0.0016
1195	1	1.56	0.79	-0.0002	0.0021	-0.0040	0.0	0.0191	-0.3020	-0.0007	-0.0011	-0.0006	0.0013
1205	1	1.56	0.79	-0.0017	-0.0007	0.0007	-0.0262	0.0105	-0.0091	-0.0009	-0.0001	0.0005	0.0016
1220	1	1.56	0.79	0.0005	-0.0016	-0.0021	-0.0524	0.0041	-0.0149	-0.0009	0.0006	0.0011	0.0021
1190	1	1.56	0.96	-0.0002	0.0021	-0.0042	0.0	0.0239	-0.3006	-0.0009	-0.0007	-0.0009	0.0015
1206	1	1.56	0.96	-0.0017	-0.0007	0.0003	-0.0262	0.0105	-0.3106	-0.0004	0.0009	0.0010	0.0015
1221	1	1.56	0.96	0.0005	-0.0012	-0.0021	-0.0524	0.0016	-0.0195	-0.0010	0.0012	0.0016	0.0020
1191	1	1.33	0.20	0.0	0.0010	-0.0040	0.0	0.0066	-0.0046	-0.0001	0.0002	-0.0000	-0.0002
1208	1	1.33	0.20	-0.0017	-0.0014	0.0007	-0.0262	0.0052	-0.0043	-0.0004	0.0001	0.0000	-0.0001
1223	1	1.33	0.20	0.0005	-0.0021	-0.0021	-0.0524	0.0045	-0.0045	-0.0006	0.0002	0.0003	-0.0001
1192	1	1.33	0.40	-0.0002	0.0021	-0.0041	0.0	0.0080	-0.0044	-0.0003	0.0002	-0.0002	-0.0003
1209	1	1.33	0.40	-0.0017	-0.0009	0.0005	-0.0262	0.0056	-0.0052	-0.0007	0.0003	0.0002	-0.0002
1224	1	1.33	0.40	0.0005	-0.0018	-0.0021	-0.0524	0.0042	-0.0058	-0.0006	0.0005	0.0001	-0.0002

Table V. (Concluded)

ID	SEG	P	MII	THO	THS	THF	AL	CM	CI	CM4DF	CM4DS	CL4DF	CL4DS
1193	1	1.33	0.54	-0.0002	0.0023	-0.0037	0.0	0.0106	-0.3042	-0.0005	0.0001	-0.0003	-0.0003
1210	1	1.33	0.54	-0.0016	-0.0003	0.0010	-0.0262	0.0069	-0.3056	-0.0007	0.0004	-0.0000	-0.0002
1225	1	1.33	0.54	0.0005	-0.0023	-0.0021	-0.0524	0.0028	-0.3086	-0.0010	0.0006	0.0004	-0.0002
1194	1	1.33	0.66	-0.0002	0.0021	-0.0040	0.0	0.0149	-0.3024	-0.0005	-0.0002	-0.0003	-0.0005
1211	1	1.33	0.66	-0.0016	-0.0028	0.0002	-0.0262	0.0068	-0.0065	-0.0008	0.0005	-0.0002	-0.0004
1226	1	1.33	0.66	0.0005	-0.0021	-0.0021	-0.0524	0.0017	-0.3059	-0.0014	0.0007	0.0005	-0.0004
412	3	1.73	0.36	-0.0005	-0.0028	0.0	0.0	0.0031	-0.0006	0.0000	-0.0000	-0.0001	-0.0001
429	3	1.73	0.36	0.0002	0.0040	-0.0038	-0.0262	0.0079	-0.0056	-0.0002	0.0005	0.0004	0.0007
445	3	1.73	0.36	0.0	0.0	0.0005	-0.0524	0.0063	-0.3063	-0.0005	0.0004	0.0005	0.0008
413	3	1.73	0.40	-0.0003	-0.0024	0.0	0.0	0.0035	-0.3006	0.0000	0.0001	0.0000	0.0000
430	3	1.73	0.40	0.0002	0.0051	-0.0029	-0.0262	0.0092	-0.0059	-0.0002	0.0001	0.0003	0.0012
446	3	1.73	0.40	0.0	0.0007	0.0002	-0.0524	0.0040	-0.3086	-0.0013	0.0008	0.0008	0.0010
414	3	1.73	0.66	-0.0005	-0.0021	-0.0005	0.0	0.0049	0.3006	0.0000	-0.0000	0.0000	0.0000
431	3	1.73	0.66	0.0002	0.0051	-0.0017	-0.0262	0.0109	-0.0056	-0.0006	0.0000	0.0004	0.0013
447	3	1.73	0.66	0.0	-0.0002	0.0002	-0.0524	0.0045	-0.3142	-0.0002	0.0005	0.0008	0.0013
415	3	1.73	0.80	-0.0003	-0.0021	-0.0002	0.0	0.0050	0.3002	-0.0000	0.0000	0.0000	0.0000
432	3	1.73	0.80	0.0	0.0042	-0.0023	-0.0262	0.0110	-0.0073	-0.0007	-0.0004	0.0004	0.0010
448	3	1.73	0.80	0.0	0.0005	0.0002	-0.0524	0.0035	-0.3164	-0.0003	0.0012	0.0014	0.0012
417	3	1.55	0.29	-0.0005	-0.0031	-0.0002	0.0	0.0037	-0.3015	-0.0001	-0.0000	-0.0000	-0.0001
434	3	1.55	0.29	0.0	0.0045	-0.0021	-0.0262	0.0067	-0.0028	0.0004	0.0003	-0.0001	0.0005
450	3	1.55	0.29	0.0	0.0005	0.0	-0.0524	0.0053	-0.0039	0.0003	0.0003	-0.0001	0.0008
418	3	1.55	0.40	-0.0005	-0.0021	-0.0002	0.0	0.0042	-0.3014	0.0000	0.0000	-0.0000	0.0000
435	3	1.55	0.40	0.0	0.0052	-0.0021	-0.0262	0.0070	-0.0048	0.0006	0.0006	-0.0003	0.0008
451	3	1.55	0.40	0.0	0.0	0.0	-0.0524	0.0046	-0.3043	0.0004	0.0004	0.0002	0.0011
419	3	1.55	0.54	-0.0005	-0.0024	-0.0002	0.0	0.0059	-0.3003	-0.0000	0.0000	0.0000	0.0001
436	3	1.55	0.54	0.0	0.0045	-0.0017	-0.0262	0.0082	-0.0054	0.0005	0.0002	-0.0001	0.0011
452	3	1.55	0.54	-0.0002	0.0007	-0.0010	-0.0524	0.0044	-0.3084	0.0005	0.0008	0.0002	0.0014
437	3	1.55	0.66	0.0	0.0051	-0.0021	-0.0262	0.0081	-0.0057	0.0008	0.0003	-0.0003	0.0014
453	3	1.55	0.66	0.0	0.0005	-0.0005	-0.0524	0.0039	-0.0039	0.0007	0.0010	0.0003	0.0018

Table VI. 7.5-Foot 4-Blade Rotor Reduced Experimental Nondimensional Hub Moment Derivatives

FLG 1: D .../DTHO FLG 2: D .../DTHS

FLG 3: D .../DTHC FLG 4: D .../DAL

ID	CFG	P	MU	FLG	DCM	DCL	DCM3P	DCL3P	DCM5P	DCL5P
896	1	1.56	0.24	1	0.1848	0.2305	0.0154	-0.0088	-0.0021	0.0008
904	1	1.56	0.26	2	0.1538	0.2528	0.0056	-0.0107	-0.0008	0.0008
902	1	1.56	0.26	3	-0.2609	0.0964	-0.0030	0.0065	-0.0024	0.0012
912	1	1.56	0.58	1	0.2551	0.3516	0.0128	-0.0230	-0.0053	0.0032
917	1	1.56	0.58	2	0.2282	0.3309	-0.0024	-0.0190	-0.0015	0.0025
924	1	1.56	0.58	3	-0.2771	0.0962	-0.0052	0.0193	0.0061	0.0002
930	1	1.56	0.70	1	0.4045	0.5231	0.0080	-0.0409	0.0011	-0.0003
944	1	1.56	0.70	2	0.3947	0.4967	-0.0146	-0.0424	-0.0051	0.0009
950	1	1.56	0.70	3	-0.3335	0.0982	-0.0097	0.0278	0.0039	0.0008
958	1	1.56	0.96	1	0.5465	0.6355	-0.0008	-0.0574	-0.0021	-0.0069
963	1	1.56	0.96	2	0.4979	0.5517	-0.0242	-0.0437	0.0073	0.0056
969	1	1.56	0.96	3	-0.3634	0.1020	-0.0064	0.0447	-0.0015	-0.0048
979	1	1.33	0.20	1	0.1445	0.0918	0.0069	0.0000	0.0039	-0.0009
985	1	1.33	0.20	2	0.1421	0.1505	0.0060	-0.0022	0.0035	0.0001
1000	1	1.33	0.20	3	-0.2078	0.1223	-0.0016	-0.0028	-0.0002	0.0030
1025	1	1.33	0.40	3	-0.2210	0.1245	-0.0019	-0.0001	-0.0003	0.0031
1035	1	1.33	0.54	1	0.2928	0.2163	0.0050	-0.0057	0.0022	0.0036
1040	1	1.33	0.54	2	0.2928	0.2259	0.0031	-0.0121	0.0064	0.0039
1047	1	1.33	0.54	3	-0.2248	0.1276	-0.0024	0.0068	-0.0018	0.0020
1060	1	1.33	0.66	1	0.4215	0.3211	0.0131	-0.0265	0.0118	0.0037
1065	1	1.33	0.66	2	0.4164	0.2933	0.0023	-0.0222	0.0064	0.0068
1072	1	1.33	0.66	3	-0.2591	0.1054	-0.0068	0.0123	-0.0030	0.0032
1085	1	2.32	0.78	1	0.2100	0.5707	0.1063	0.0485	0.0056	0.0005
1092	1	2.32	0.78	2	0.1966	0.4486	0.1600	-0.0356	0.0124	-0.0050
1102	1	2.32	0.78	3	-0.3734	0.0472	-0.0361	-0.1172	0.0004	0.0001
1119	1	2.32	1.07	1	0.4007	0.9228	0.1952	0.1319	0.0143	-0.0026
1125	1	2.32	1.06	2	0.3705	0.6971	0.2495	0.0192	0.0291	-0.0224
1133	1	2.32	1.06	3	-0.4537	0.0363	-0.0801	-0.2304	0.0259	0.0235
1145	1	2.32	1.44	1	0.6990	1.5434	0.2628	0.1292	0.0144	-0.0205
1150	1	2.32	1.44	2	0.6199	0.9864	0.3320	0.0360	0.0359	-0.0757
1157	1	2.32	1.44	3	-0.6010	-0.0950	0.0091	-0.3293	0.0950	0.0103
1165	1	2.32	1.75	1	0.9112	1.9180	0.2563	0.3242	-0.0445	-0.0734
169	3	2.32	0.59	1	0.1822	0.4104	0.1062	0.0173	-0.0094	-0.0033
175	3	2.32	0.59	2	0.1527	0.3676	0.1319	-0.0524	-0.0080	-0.0093
183	3	2.32	0.59	3	-0.3543	0.0462	-0.0341	-0.0934	0.0092	-0.0090
193	3	2.32	0.80	1	0.2558	0.6064	0.1462	0.0449	-0.0158	-0.0026
199	3	2.32	0.80	2	0.2626	0.5232	0.1972	-0.0272	-0.0135	-0.0140
206	3	2.32	0.80	3	-0.3873	0.0765	-0.0494	-0.1794	0.0154	-0.0126
233	3	1.55	0.29	1	0.1469	0.1289	0.0135	-0.0037	-0.0080	0.0055
240	3	1.55	0.29	2	0.1601	0.2149	0.0088	-0.0045	-0.0002	0.0042
247	3	1.55	0.29	3	-0.2706	0.1113	-0.0036	-0.0007	-0.0056	-0.0023
257	3	1.55	0.40	1	0.1733	0.2046	0.0147	-0.0068	-0.0045	0.0072
261	3	1.55	0.40	2	0.2092	0.2685	0.0040	-0.0091	-0.0006	0.0035
268	3	1.55	0.40	3	-0.2743	0.1140	-0.0011	0.0054	-0.0060	-0.0017
292	3	1.55	0.54	1	0.2802	0.3566	0.0102	-0.0259	-0.0099	0.0110
304	3	1.55	0.54	3	-0.3049	0.0971	-0.0005	0.0177	-0.0012	-0.0011

Table VI. (Concluded)

FLG 1: D.../DTHO

FLG 2: D.../DTHS

FLG 3: D.../DTHC

FLG 4: D.../DAL

ID	CFG	R	MU	FLG	DCM	DCL	DCM3R	DCL3R	DCM5R	DCL5R
310	3	1.55	0.66	1	0.3012	0.3867	0.0191	-0.0342	-0.0191	0.0004
314	3	1.55	0.66	2	0.3870	0.4231	-0.0079	-0.0304	0.0023	0.0023
318	3	1.55	0.66	3	-0.3105	0.0993	-0.0032	0.0250	-0.0026	0.0061
330	3	1.73	0.36	1	0.1612	0.1963	0.0191	-0.0175	-0.0000	-0.0008
335	3	1.73	0.36	2	0.1558	0.2671	0.0046	-0.0073	-0.0041	-0.0008
343	3	1.73	0.36	3	-0.3056	0.0820	-0.0017	0.0002	0.0017	0.0000
352	3	1.73	0.40	1	0.1850	0.3020	0.0068	-0.0289	-0.0007	0.0037
356	3	1.73	0.40	2	0.1633	0.3261	-0.0030	-0.0172	-0.0126	-0.0010
362	3	1.73	0.40	3	-0.2968	0.0946	0.0062	0.0181	-0.0009	-0.0056
373	3	1.73	0.66	1	0.3230	0.5793	0.0012	-0.0349	-0.0036	0.0139
377	3	1.73	0.66	2	0.3111	0.4964	-0.0365	-0.0169	0.0012	0.0139
385	3	1.73	0.66	3	-0.3171	0.0817	0.0170	0.0314	-0.0109	-0.0100
393	3	1.73	0.90	1	0.3425	0.5542	-0.0206	-0.0254	-0.0065	0.0049
397	3	1.73	0.90	2	0.4610	0.6757	-0.0638	-0.0504	0.0120	0.0231
401	3	1.73	0.90	3	-0.4127	0.0334	0.0436	0.0474	-0.0024	-0.0189
1181	1	2.32	0.78	4	0.1449	0.2966	0.0341	0.0402	0.0036	0.0027
1182	1	2.32	1.07	4	0.2792	0.5593	0.1384	0.1875	0.0020	-0.0300
1183	1	2.32	1.44	4	0.6202	0.8470	0.7497	0.4635	-0.0677	-0.1003
1184	1	2.32	1.77	4	1.0963	0.9975	1.2171	0.6321	-0.2234	-0.3671
1186	1	1.56	0.43	4	0.0792	0.0696	0.0032	-0.0051	-0.0006	-0.0021
1187	1	1.56	0.58	4	0.1411	0.1447	0.0048	-0.0159	-0.0075	0.0003
1188	1	1.56	0.79	4	0.2851	0.2946	0.0094	-0.0326	-0.0057	-0.0011
1189	1	1.56	0.96	4	0.4271	0.3423	0.0056	-0.0428	-0.0038	-0.0050
1191	1	1.33	0.29	4	0.0409	-0.0010	0.0040	-0.0028	0.0037	-0.0030
1192	1	1.33	0.40	4	0.0709	0.0223	0.0025	-0.0058	0.0019	-0.0000
1193	1	1.33	0.54	4	0.1499	0.0947	0.0066	-0.0116	0.0045	-0.0021
1194	1	1.33	0.66	4	0.2535	0.1429	0.0108	-0.0157	0.0072	0.0015
412	3	1.73	0.36	4	-0.0621	0.1086	0.0151	-0.0122	-0.0045	0.0001
413	3	1.73	0.40	4	-0.0483	0.1539	0.0129	-0.0144	-0.0059	0.0000
414	3	1.73	0.66	4	0.0061	0.2819	0.0141	-0.0123	-0.0103	-0.0022
415	3	1.73	0.90	4	0.0292	0.3180	0.0140	-0.0260	0.0094	-0.0033
417	3	1.55	0.29	4	-0.0304	0.0452	0.0049	-0.0026	-0.0120	0.0037
418	3	1.55	0.40	4	-0.0039	0.0926	0.0068	-0.0081	-0.0140	0.0032
419	3	1.55	0.54	4	0.0281	0.1549	0.0073	-0.0090	-0.0183	0.0058
437	3	1.55	0.66	4	0.1957	0.1577	0.0083	-0.0256	-0.0043	0.0009

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